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SECTION 801 - PROJECT TIPS

801.1 – PROJECT START UP

The following is a list of helpful tips to remember during the start of a project. These tips are not necessarily in any specific order and may not apply to every project.

A. Work that can be done between advertising and bid opening:

1. Get a copy of the plans and proposal. Begin reviewing.
2. From the office request (via District Construction Engineer):
3. Design computations (these are available electronically on occasion)
4. Project stamp
5. List of known Right-of-Way conflicts and agreements
6. List of known utility conflicts and agreements
7. Municipal Encroachment agreements
8. Copies of correspondence to date.
9. Review the contract documents for unique project items and conditions
10. Speak with the designer in charge of the project. Inquire about possible contract work issues.
11. Speak with the right-of-way agent responsible for agreements made for the project. Review ROW conflicts, agreements and landowner reactions.
12. Speak with the NHDOT utility coordinator. Get key utility company representatives' telephone number(s). Inquire about utility company schedules.
13. Visit the site and familiarize yourself with the project.

B. Work that can be done between bid opening and G&C approval:

Set up project records including but not limited to the Record Book, Lab Book, and field notebooks (drainage, road, etc.). Follow the guidelines given in this manual.

Schedule a pre-survey meeting and request initial layout.

Prepare an agenda for the pre-construction conference. Use the “boiler-plate” preconstruction minutes sample provided by the Construction office. If the project is set up for CMS, a copy of the sample preconstruction minutes may be found in the “Other State Forms” folder on the computer’s desktop (Pcon-min). The boilerplate format may also be used when writing the draft of the minutes to be sent to the office for final draft and distribution. Keep in mind that this sample should be used as a guide only and should be tailored to address the specifics of the current project.

Schedule the pre-construction conference (the meeting should be scheduled for a date after Governor & Council approval has been given).

Find a place for the office trailer on the project. Find multiple locations and keep in mind the effects of the trailer’s exposure to the weather and access during all phases of construction (i.e.: Is the area in a flood plain? Is it plowable?).

C. Work to be done after Governor & Council approval:

Hold the pre-construction conference.

Discuss any early submissions required of the contractor (this can be done before, during, and after the pre-construction conference).

Storm Water Pollution Prevention Plan (SWPPP)

Demolition or removal plans

Traffic control plans

Documentation of traffic control devices for NCHRP 350 compliance

Certificates of Compliance

Contractor's schedule

Pit and disposal agreements

Project specific shop drawings or blasting plans

Subcontractor approvals

Notify the construction office and the District Construction Engineer of:

Trailer location

Phone numbers

Start date of work.

Submit a press release thru the NHDOT's Public Information Officer (271-6495) or CARS-511 report.

Make sure the contractor has the correct postings for the project bulletin board:

Check with Labor Compliance for current postings required.

Army Corps' Permit

Wetlands and Non-Site Specific Permit

EPA Notice of Intent (NOI). The status of the NOI should be checked prior to the start of work. The NOI must have an "ACTIVE" status for the contractor to begin work. This can be checked on the web at: <http://cfpub1.epa.gov/npdes/stormwater/noi/noisearch.cfm>, or by phone at 1-866-352-7755.

Other project information, if applicable.

Videotape and/or photograph the project area.

Contact the abutters. If not possible to meet face to face for initial contact, use the "intro" document found under the "Other State Forms" folder on the computer's desktop for CMS projects or contact the Construction office for a copy of the letter. Include a business card with project phone numbers in the letter or when meeting face to face.

Notify the Bureau of Human Resource's Labor Compliance Officer and Bureau of Construction's Computer Coordinator for visits and/or set-ups at the office trailer for federal-aid projects and CMS projects, respectively.

Keep notes regarding the contractor's performance, contract plans, and environmental plans throughout the project to help with evaluations at the end of the project.

At the beginning of the project create issues lists (plan, bridge, etc.) and a Record Book "General Notes" page. These should be accessible to all on-site DOT personnel for comment throughout the project.

801.2 – PROJECT SUSPENSION

A. Things to do prior to suspension:

Schedule a Winter Suspension Meeting prior to October 15 per Specification 104.07D.

Contact the construction office to issue a suspension letter.

Check with the Maintenance Bureau's District Engineer for their concerns prior to suspension.

Create a punch list for the contractor to complete prior to suspension.

Once the area is stabilized, discontinue erosion control monitoring.

Cover or remove all construction signs.

801.3 – PROJECT TERMINATION

A. Things to do prior to termination:

Create a final punch list for the contractor.

Set a date for the project final.

Upon acceptance of the project, contact the construction office to issue a completion letter.

EPA Notice of Termination (NOT) should be filed within 30 days of project termination (this should be done by the contractor and the construction office). This can be done on the web at: <http://cfpub1.epa.gov.npdes/stormwater/enoi.cfm>

Fill out the following forms from the construction office:

Contractor Confidential Evaluation

Plan Evaluation

Consultant Plan Evaluation

Environmental Evaluation

Summary of Non-Conforming Materials

Completion Certificate and Contract Time Extension

Complete project records and turn into Engineering Audit as soon as possible (within 10 days is preferable, within 30 days is acceptable).

Contact the construction office to change or cancel project phone numbers.

Check the trailer site to be sure that the contractor has cleaned up the area.

SECTION 802 - GUIDELINES FOR PREPARATION OF PROJECT RECORDS

802.1 – INTRODUCTION TO RECORD KEEPING PROCEDURES

The project records are an essential part of any construction project. They provide the means for checking and verifying the compliance of the project to the contract, they are the means by which the contract is paid, and they are the State's primary reference in the event of any future question, problem, or litigation.

Project records consist of seven major parts:

Bound field notebooks and other miscellaneous source documents.

A Quantity Book for preparation of partial estimates.

Daily reports of construction, utility, and extra work.

A Record Plan showing changes made during construction.

A Record Book consisting of item summary pages, substantiating documents, and calculation pages.

A correspondence folder.

A Lab Book.

These in detail are:

A. Bound Field Notebooks:

Bound field notebooks shall be supplied by the Construction Bureau office or purchased through the contract by the contractor and paid per specification 698.5.4. Other source documents include cross-section rolls used to compute quantities, weight slips, etc.

Maximum use shall be made of the bound field notebooks, completing computations in them whenever possible. Computed quantities in these notebooks should be totaled and checked, then posted directly to the Quantity Book. Any other quantities, such as rock structure excavation plotted and computed on profile paper, may be totaled at their source and posted directly to the Record Book.

B. The Quantity Book:

The Quantity Book provides up-to-date quantities for estimate preparation and payment. See the "Guidelines Pertaining to the Quantity Book" in Section 803 and the sample Quantity Book in Section 804 for more information.

C. Daily Reports:

Construction daily reports shall be completed for each day in CMS or on preprinted Daily Report forms provided by the Construction Bureau Office. Paper reports will be made out in duplicate, with the original sent to the Construction Bureau Office and a copy retained in the field.

A daily report must be submitted for each day elapsing between the start and finish of the project, except when work is suspended. When the contractor or the engineers work on either a Saturday or Sunday, a daily report must be completed.

The daily reports should constitute a diary covering all phases of the work.

Fill out the daily reports completely. The list below is a sample of the information to be included on the daily reports. This list is not all inclusive but should give the Contract Administrator and other project personnel an idea as to what activities and events should be recorded.

Weather.

Quantity and type of manpower and equipment used.

What and where operations and items are in progress, be specific.

Information affecting the overall progress of the work. Indicate the completeness of the various phases periodically throughout the work.

Accident information. NOTE: Accident report forms, supplied by the Construction Bureau office, must also be filled out and the office notified in the event of any and all accidents within the construction zone.

Discussions with local officials and landowners.

All utility meetings, phone calls, discussions and work performed relative to the project.

Discussions with the contractor that do not require a written letter but pertain to the work, public safety, or construction signing. Record action taken if any.

Non-working days with an explanation for non-work day status.

Extenuating circumstances that may have a bearing on working days or time extensions.

Consultant inspector/tester names, times worked, type of work performed.

The date the project is started, suspended, resumed, and completed as applicable. For CMS projects, these can be found under “Activity Items”. For paper reports record the number of working days used from the beginning of work to the completion of work (except December 1 – April 1), regardless of whether a number of working days or a calendar date is specified in the proposal.

Daily Reports of Extra Work: See Section 152 of this Manual for a sample report and information required.

Include any other information of importance to the project. Be concise, but thorough, while keeping editorializing to a minimum.

D. Record Plans:

The Record Plans shall consist of a full-size set of plans provided by the Construction Bureau Office at the beginning of a project. These plans are to be updated with actual measurements and information regarding changes made through the construction period. In Engineering Audit at the end of the project, the changes will be transferred to mylars and become the project “As-Built” plans. See *As-Built Plan Completion* under Audit Phase 5 of the Engineering Audit Process Manual, found in Section 808 of this manual, for more information.

E. Record Book:

The Record Book shall consist of Item Summary pages from CMS or preprinted forms supplied by the Construction Bureau Office. It shall also include substantiating documents and calculation pages.

An Item Summary page is to be used for each individual item. Items with the same item number but different appropriation codes must have separate pages.

When an item of the contract is not used in the construction of the project, write “None” or “Item Eliminated” on the Item Summary page and explain the reason in the “Remarks” section of the summary page.

The second sheet of the Summary page is designed for the purpose of explaining item overruns and underruns. An explanation is required for:

1. Variation (plus or minus) in cost exceeding 10% on items whose contract total exceeds the monetary value of \$1,000.00.
2. Variation (plus or minus) in cost exceeding 50% on items whose contract total is less than or equal to \$1,000.00.

The project records should be kept up to date at all times. Record Book computations such as those for rock excavation should be legible, accurate, and complete. If the quantities in any given field book page, calculation sheet, or other source document are complete and have

been checked, then the page total should be entered into the Record Book. Keeping the Record Book up-to-date helps minimize the time spent on finalizing the records at the end of the project.

F. Correspondence Folder:

Prior to and at the start of any project, the Contract Administrator should set up a filing system to collect, organize, and store all miscellaneous documentation received and/or created throughout the course of the project.

Perhaps the most important and universal folder needed in the filing system is the correspondence folder. The correspondence folder should include all documentation such as letters, e-mails, faxes, and letters-of-transmittals. It may also include other documentation, such as utility force account agreements and shop drawings.

However, it is up to the Contract Administrator to set up a filing system that is most appropriate for the size and nature of the job. For example, if it is a project where utility issues are expected to be on-going, the force account agreements and all other utility information may be better placed in their own folder. The same holds true for shop drawings. If the only shop drawing required on the job is for traffic signs, then it may fit in the correspondence folder. But, if it is a bridge project, a separate folder for shop drawings is generally more appropriate.

Separate folders should always be created for payrolls (required on all federal-aid projects) and the Storm Water Pollution Prevention Plan (SWPPP).

A blank "Table of Contents" sheet may be created and placed at the front of all folders for immediate updating as documentation is added to the folder.

G. Lab Book:

The final component of the project records is the Lab Book. It is generally a separate 3-ring binder that is used to hold copies of all field and/or lab test results. Information on all materials tested, such as sand, gravels, pavement, pavement markings, concrete, reinforcing steel, etc., should be included.

The Lab Book may be organized by using tab sheets to separate the different types of materials. On large projects, it may be appropriate to break the sections down even further. For example, soils testing may be broken down by item (sand, gravel, crushed gravel, etc.) and/or by test (proctors, density reports, gradations). Concrete may be broken down by type (AA, A, B) and/or by category (mix designs, gradations, cylinder breaks). It doesn't matter how the Lab Book is set up as long as it is organized and easy to follow.

The Summary of Non-conforming Materials (required on all projects with materials testing) is best located at the front of this book. Engineering Audit should be made aware of its location when turning in the project records.

Some testing reports may not fit into the Lab Book or even a separate folder. Structural steel inspection reports are generally quite numerous and take up a fair amount of space. It is not uncommon to place these reports in their own labeled box.

802.2 – GENERAL INSTRUCTIONS

When entering information and data in the records, bear in mind that the records developed during construction are the only material available for preparation of the final estimate, and are the Department's best defense in litigation. Therefore, all descriptive data and field measurements required for the above purposes should be included.

A. Record System Numbering:

All pages of the record system must be uniquely numbered, indexed, and cross-indexed by project personnel. The bound field notebooks are to be numbered with two letters preceding the numerals (i.e. RN1-10 denotes roadway field notebook 1, page 10; DN1-10 denotes drainage field notebook 1, page 10; BN2-10 denotes bridge field notebook 2, page 10).

The most influencing factor on the numbering system used is the project size. Large projects and projects with multiple appropriation codes require some forethought. Without prior planning, the numbers can get crowded. As far as Engineering Audit is concerned, the two most important aspects of numbering are uniqueness of numbers (i.e. don't use the same number twice), and item sequence. The contract bid items should be sequenced in the order that they appear in the CMS Record Book or for paper projects as they appear on the estimate. Items with multiple appropriation codes should have separate numbers and appear in sequence. The contract items should be followed by extra work, per specification work, and supplemental agreements. See Section 807 for suggested Record Book page numbering examples.

Bound field notebooks, Record Book item summary pages, and the Quantity Book should be set up at the very beginning of the project. Before setting up the Record Book, and throughout the project, read the Special Provisions carefully for unusual items that may differ in method of measurement and payment.

B. Certificates of Compliance:

Certificates of Compliance should be placed in the Record Book preceding the Item Summary pages and numbered appropriately. However, on projects with numerous certificates, a folder in the project files may be used. Contract Administrators are reminded that for materials requiring a Certificate of Compliance, no payment will be made for the items of work in which said materials are to be incorporated until properly executed certificates have been accepted by the Contract Administrator.

C. General Notes:

An important part of the Record Book is the General Notes. These are a collection of notes made by the Contract Administrator or other project personnel during construction of the project and placed near the beginning of the Record Book (see the sample Record Book in Section 807 of this manual for an example). Include all information in the General Notes that might be essential in adjusting any claims that may arise.

D. Field Measurements:

The contractor should be notified when measurements pertaining to pay items of work are being made, and if the contractor desires, these measurements will be made in the presence of someone it delegates. Measurements on which the Contract Administrator and the contractor do not agree should be called to the attention of the District Construction Engineer. All transactions between the contractor and the Contract Administrator that are likely to be protested, or where payments are involved, should be in writing.

Carry computations only to the decimal place that is consistent with the accuracy of the basic information. The quantities in the Record Book should be paid per the Method of Measurement in the Specifications. See Table 8-1 at the end of this section for a summary of the Record Book decimal point system to be used.

E. Authorization of Records:

An important aspect of the record system is the complete signing and dating of all notes, calculations, item summary entries, totals, and other information. Bound field notebooks should include signatures and dates of those posting, totaling, checking, and approving page entries. An item summary page approved by the Contract Administrator will be an indication to the Engineering Audit Section that a competent check has been made of that item and that the Contract Administrator is satisfied with the figures.

F. Quantity Book Pages that go into Record Book:

For non-CMS projects it will be noted that some of the Quantity Book pages can be used in the Record Book. Examples are unit items; lump sum items; per ton items such as pavements; some items where the unit of payment is “each”, such as trees, bounds, etc.; and any other item where the quantity recorded is a final quantity. These pages should be set up for the Record Book first, so that the pages suitable for use in the Quantity Book can be separated, and Daily Summary pages can be added for the balance of the items, making the Quantity Book complete.

When the project field records are complete, the Contract Administrator should refer to the Engineering Audit Process Manual Appendix A, found in Section 808 of this manual, to ensure all necessary information has been included.

All records, including source documents, are to be transferred to the Engineering Audit Section after completion of the project.

Upon completion of the audit by the Engineering Audit Section, the Contract Administrator will be provided an informational copy of the final estimate for his/her review.

TABLE 8-1: RECORD BOOK DECIMAL POINT SYSTEM

All items listed below should be figured to the decimal point indicated. All others are to be figured to the nearest whole unit. This table should be used as a guide only. Refer to the Method of Measurement in the specifications for a detailed description of the payment units.

<u>Item No./Description</u>	<u>Method of</u> <u>Measurement</u>	<u>Method of</u> <u>Measurement</u>
	<u>Feet</u>	<u>Metric</u>
202.41 Removal of Existing Pipe	1 ft	0.1 m
202.6 Curb Removal for Storage	1 ft	0.1 m
403.1 to 403.95 Hot Bituminous Pavements	0.1 T	0.1 t
410.21 to 410.41 Asphalts for Tack and Surface Treatments	0.1 T	0.1 t
411.1 to 411.4 Plant Mix Surface Treatments	0.1 T	0.1 t
506.1 Timber Sheet Piling	0.01 MBM	0.01 m ³
510 Bearing Piles	See table under 510.4.1	
512 Preparation for Concrete Repairs	0.1 yd ²	0.1 m ²
520 Concrete, non (F) items	0.1 yd ³	0.1 m ³
570.9 Resetting Masonry Wall	0.1 yd ³	0.1 m ³
572 Reconstructing Stone Walls	1 ft	0.5 m
583 Riprap	0.1 yd ³	0.1 m ³
603.1 to 603.7 Culverts and Storm Drains	0.1 ft	0.1 m
604.1 to 604.39 CB's, DI's, and MH's	0.1 units	0.1 units
604.4 and 604.5 Reconstructing Basins	0.1 ft	0.1 m
605 Underdrain	0.1 ft	0.1 m
606 Rail	0.1 ft	0.1 m
607 Fences	0.1 ft	0.1 m
609 Curbs	0.1 ft	0.1 m
614 Electrical Conduit	0.1 ft	0.1 m
642 Limestone	0.01 T	0.01 t
643 Fertilizer	0.01 T	0.01 t
645.1 Mulch	0.01 a	0.01 ha
645.71 Monitoring Erosion and Sediment Control	0.25 hrs	0.25 hrs
646 Turf Establishment	0.01 a	0.01 ha

802.3 – INFORMATION REQUIRED ON RECORD PLAN

The Record Plans are to be considered a part of the Project Records. A set of white prints will be issued to the Contract Administrator for each project. These may be picked up at the Construction Bureau Office at the beginning of each project. It is suggested that the Record Plans remain in the Contract Administrator's office at all times during construction.

Upon completion of the project, the Record Plans must be turned into the Engineering Audit with the information outlined above plotted on them. Engineering Audit will transfer the Record Plans onto mylars during Phase 5 of the Audit Process. For a complete list of details on Record Plan requirements and expectations see Engineering Audit Phase 5 in the Engineering Audit Process Manual, found in Section 808 of this manual. All changes made on the Record Plans should be done in red.

SECTION 803 - GUIDELINES PERTAINING TO THE QUANTITY BOOK

803.1 – GENERAL

The purpose of the Quantity Book is to keep a running total of the quantity of work performed. It provides a means of documentation for quantities used in preparation of partial estimates and lends itself to an operational audit at any time by project or non-project personnel.

A. Non-CMS Projects:

For non-CMS projects, the Quantity Book (consisting of pre-printed daily summary pages supplied by the Construction Bureau Office) may be kept separate in a loose-leaf book or as a separate section of the Record Book, depending on the size of the project. The Quantity Book should be set up and numbered at the beginning of the project in the same manner as the Record Book. Record Book item summary pages in some instances may be substituted for the Quantity Book daily summary pages (e.g. lump sum, unit, and bituminous pavement items), and upon project completion, these pages may be transferred to the Record Book. The completed Quantity Book is a part of the contract records and shall be turned in at the completion of the project. See Section 806.1 of this manual for guidelines pertaining to the Record Book.

B. CMS Projects:

For computer generated CMS projects, the Quantity Book consists of entries made electronically. The Quantity Book should be set up and numbered the same as the Record Book. While "direct entries" (DE) may be made in the Quantity Book for the source of payments, it is recommended to identify source documentation as much as possible. This will aid in any intermediate field audits and may allow the entry to be electronically copied directly from the Quantity Book to the Record Book.

C. General:

Whenever possible, entries in the Quantity Book should be made daily. Exact quantity entries are preferred, but there will be times when exact measurements are not able to be obtained. For example, in the case of an estimate period occurring in the middle of blasting operations, a reasonable ledge quantity will most likely have to be estimated. In these instances, approximate measurements and calculations may be performed to arrive at a reasonable figure for entry. Any quantities that are based on a tally or load count submitted by the contractor must be substantiated by a periodic and documented check by D.O.T. field personnel. Any additional computations and measurements used to arrive at a quantity should be made either in the bound field notebooks or on loose paper that is properly referenced and retained in the Quantity Book.

and/or Record Book. It is suggested that the Contract Administrator assign specific items to each inspector on the job and that each inspector be responsible to measure, enter, and initial all quantities he/she is assigned to cover. This separation of duties minimizes confusion and rework. The following are suggested satisfactory methods of handling some of the major items.

803.2 – ITEM APPLICATIONS

A. Clearing and Grubbing:

This item consists of three procedures: cutting, disposal, and grubbing (stump removal).. It is suggested that at the start of the project, the Contract Administrator set up a proportional system of payment when each procedure is completed for an area. As an illustration, for a project with approximately equal cuts and fills, 40% could be paid for cutting, 20% for disposal, and the remaining 40% for grubbing. These percentages may be varied for the individual project depending on the number of areas that would require grubbing. The land area can be computed on a station-to-station basis from the offsets in staking out or as an estimated percentage of the clearing areas shown on the flat plans. This land area, multiplied by the appropriate percentage, will give the quantity to enter daily.

B. Excavation and Embankment:

The Contract Administrator will establish partial estimate quantities for these items by an estimating system set up at the beginning of the project from quantities shown on the plan or cross-sections. The system chosen will be determined by the type of project and method of operation used by the contractor, and should be clearly stated on the Quantity Book Daily Summary page.

Often an Excel spreadsheet can be created (or may already exist from the Design Process) that will allow the Contract Administrator to estimate the quantity complete at each station and provide a running total of the material placed.

C. Base Courses:

Daily entries shall be the product of simple three-dimensional computations, or length times a constant if the template is being substantially filled. Where base courses are being constructed consistently day after day and a simple computation will adequately cover a number of days' work or the entire estimate period, it will be satisfactory to record only the stations covered daily and enter quantities at the end of the period or as segments of the work are completed. These items may also be paid from an Excel spreadsheet similar to excavation and embankment.

D. Pavements:

For paper projects these items may be handled by the entry of daily quantities to a Record Book item summary page in lieu of a Quantity Book daily summary page placed temporarily in the Quantity Book or section until completion of the item. For both paper and CMS projects, source information should come from weight slips from automated plants.

E. Bridge Items:

Many bridge items are paid for on a unit basis. Often, construction of these items consists of delivery of the material, placing of the material, and a finishing or clean-up phase. To expedite partial estimate payment, the Contract Administrator may use a percentage system based on the approximate cost of several phases of the construction of the item related to the total item bid price. For example, structural steel might be paid on a basis of 75% of the total bid

price for delivery, 20% for erection and bolting, and 5% for painting. The Contract Administrator should review this method of payment with the District Construction Engineer and the contractor to ensure that the percentages used do not reflect payment in excess of the value of the work in place.

When steel reinforcing is paid for by the pound (kilogram), partial estimates may be made on a similar percentage basis.

Bridge items paid for on a cubic yard (cubic meter) basis require accurate engineering computations for final payment. Partial payments should be documented with approximate calculations of the volumes being constructed and the calculations should be retained in an appropriate project file.

The method used for partial payment should be briefly explained by the Contract Administrator on the Quantity Book daily summary sheets

F. Drainage:

Daily entries in the Quantity Book will normally come from measurements in the bound field notebooks. Where quantities must be computed and time available prevents them from being completed at the end of the day, make a simple approximate computation in the field notebook. Use this quantity for entry on the Quantity Book daily summary page for paper projects. On CMS projects, partial daily measurements may be kept in the field book until the end of the estimate period. If a particular run is not complete, this pay length must be indicated as “estimated” or “approximate” so that it will not be confused with the final computations when totaling the notebook pages.

G. Linearly Measured Items:

Guardrail, fence, curb, and similar items may be measured or estimated by station-to-station runs and entered on the Quantity Book daily summary page. Apply a percentage to the length relative to the portion of work done where only posts are set; curb joints are left unmortared; or similar partly-constructed items occur. State the percentage for each phase.

H. Maintenance of Traffic:

Establish a system of payment based on project activity or by dividing the unit item by the anticipated number of estimate periods. Record the system used under the remarks of the first entry to the Quantity Book.

I. General:

When payment is to be made for partially completed items, the Contract Administrator will use sound engineering judgment to determine a percentage for each phase of the work. Once the percentages are established, record them at the top of the daily summary page under the remarks of the first entry to the Quantity Book.

At the completion of a “paper” project, transfer the Quantity Book and back-up information to the Engineering Audit Section with the other project records. The Quantity Book used on computer generated CMS projects will be retained in an electronic form and does not need to be printed for Engineering Audit.

SECTION 804 - SAMPLE QUANTITY BOOK

Shown on the following pages are samples of acceptable methods of record keeping in the Quantity Book for both roadway and bridge construction projects.

If Excel spreadsheets are used to aid in the computation of repetitive quantities, it is important for auditing purposes that the spreadsheets show as much detail as hand calculations.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
QUANTITY BOOK ITEM SUMMARY

QB Page 100.00

Project Name	LACONIA, NHS-018-2 (104), 99999			Certificate Of Compliance:	Not Required
Item Number:	201.1	Appropriation Code:	PAR		
Item Description:	CLEARING AND GRUBBING (F)				
Contract Price:	\$14,000.00	Contract Quantity:	0.95 AC	B&E Quantity:	0.95 AC

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
RN 1-04	RT	05/10/1994	Area A cleared per plan.	0.65	0.65	2
		ESTIMATE # 2	05/01/1994 – 05/15/1994 TOTAL :	0.65		
RN 1-04	RT	06/16/1994	Area B cleared per plan.	0.30	0.95	5
		ESTIMATE # 5	06/15/1994 – 06/30/1994 TOTAL :	0.30		
				Total	0.95 AC	

Checked By: _____ Date: 11/10/1996Approved By: _____ Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
QUANTITY BOOK ITEM SUMMARY

QB Page 106.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	203.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	COMMON EXCAVATION		
Contract Price:	\$5.82	Contract Quantity: 9,800.00 CY	B&E Quantity: 10,000.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
EXCEL SHT	RT	05/15/1994	Design computations on Excel sheet as of 05/15/1994	1,260.00	1,260.00	2
		ESTIMATE # 2	05/01/1994 – 05/15/1994 TOTAL :	1,260.00		
EXCEL SHT	RT	06/30/1994	Design computations on Excel sheet as of 05/15/1994	2,114.00	3,374.00	5
		ESTIMATE # 5	06/16/1994 – 06/30/1994 TOTAL :	2,114.00		
DE	RT	07/15/1994	Estimated material removed from Sta 501+00 – 502+05	2,250.00	5,624.00	6
		ESTIMATE # 6	07/01/1994 – 07/15/1994 TOTAL :	2,250.00		
DE	RT	08/15/1994	All material removed per plan.	4,176.00	9,800.00	8
		ESTIMATE # 8	08/01/1994 – 08/15/1994 TOTAL :	4,176.00		
Total					9,800.00 CY	

Checked By: _____ Date: 11/10/1996Approved By: _____ Date: 11/10/1996

Excavation not covered by cross-sections and rock excavation (boulders) should **not** be considered one in the same. Excavation not covered by cross-sections is measured before actual excavation starts and includes any mounds or objects above the ground surface that are not shown on the cross-sections, whereas boulders (rock excavation) are measured in their entirety.

SAMPLE EXCEL SPREADSHEET FOR COMMON EXCAVATION

Common Excavation #203.1				
Location	CY from design	Additions	% Complete	CY in place
<u>Route 87</u>				
500+42				
500+50	2.4		100	2.4
500+60	2		100	2
500+70	150		100	150
500+80	1005		100	1005
500+90	100		85	85
501+00	13		70	9.1
501+10	1.25		70	0.875
501+20	3.25		70	2.275
501+30	2		70	1.4
501+40	3.15		70	2.205
501+50	15.65		70	10.955
501+60	35.5		70	24.85
501+70	70		70	49
501+80	117.65		100	117.65
501+90	170.65		100	170.65
501+96	150		100	150
Break in quantities for bridge				
502+55				
502+60	212.38		100	212.38
502+70	551.3		100	551.3
502+80	146.4		100	146.4
502+90	114.4		100	114.4
503+00	529		100	529
503+10	484		100	484
503+20	462.25		100	462.25
503+30	398.25		100	398.25
503+40	312		100	312
503+50	216.25		100	216.25
503+60	134.25		100	134.25
503+70	92.75		100	92.75
503+80	82.25		60	49.35
503+90	80.75		50	40.375
504+00	56.6		50	28.3
504+10	28.85		50	14.425
504+20	18.5		50	9.25
504+30	13		60	7.8
504+40	11		70	7.7
504+50	20.5		100	20.5
504+60	33.5		100	33.5
504+70	26		100	26
504+80	15		100	15
504+90	15.35		100	15.35
505+00	16.35		100	16.35

Division 800

505+10	13.5		100	13.5
505+20	7.5		100	7.5
505+30	3		100	3
505+40	1360	23	100	1383
505+50	1251	137	100	1388
505+60	567	40	100	607
505+70	6.25		50	3.125
505+80	6.25		20	1.25
505+90	0		100	0
End				
<u>Top Soil replacement</u>				
topsoil	673.3		100	673.3

TOTAL ADDITIONS:

200

DESIGN SUB-TOTAL: 9800.18

TOTAL = 9800.165

ROUNDING: 0.22

ROUNDING = 0.22

DESIGN ITEM TOTAL: 9800.4

PRINTED ESTIMATE #

8

PAY TOTAL = 9800.04

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
QUANTITY BOOK ITEM SUMMARY

QB Page 140.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	544.	Appropriation Code:	PAR
Item Description:	REINFORCING STEEL (F)		
Contract Price:	\$1.25	Contract Quantity:	37,284.00 LBS
		B&E Quantity:	

37,284.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
DE	RT	05/12/1994	Abutment A footing placed per plan, from reinforcing summary.	11,210.00	11,210.00	2
DE	RT	ESTIMATE # 2 06/25/1994	05/01/1994 – 05/15/1994 TOTAL : Abutment B footing placed per plan, from reinforcing summary.	11,210.00 12,151.00	23,361.00	5
BN 1-05	RT	ESTIMATE # 5 07/11/1994	06/16/1994 – 06/30/1994 TOTAL : Abutment A wall placed per plan.	12,151.00 7,250.00	30,611.00	6
DE	RT	ESTIMATE # 6 08/13/1994	07/01/1994 – 07/15/1994 TOTAL : Northwest wing wall placed per plan.	7,250.00 4,176.00	34,787.00	8
		ESTIMATE # 8	08/01/1994 – 08/15/1994 TOTAL :	4,176.00		
Total					34,787.00 LBS	

Checked By: _____ Date: 11/10/1996Approved By: _____ Date: 11/10/1996

Print Date: 11/10/1996

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QUANTITY BOOK ITEM SUMMARY

QB Page 154.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	603.00215	Appropriation Code: PAR	Certificate Of Compliance: Required
Item Description:	15 INCH R.C. PIPE, CLASS III		
Contract Price:	\$28.60	Contract Quantity: 65.00 LF	B&E Quantity: 124.00 LF

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
DN 1-06	RT	05/13/1994	Partial length DN #6 = 45 lf	45.00	45.00	2
DN 1-08	RT	06/19/1994	ESTIMATE # 2 05/01/1994 – 05/15/1994 TOTAL : DN #6 completed, pay 65 – 45 = 20 lf	45.00 20.00	65.00	5
				ESTIMATE # 5 06/15/1994 – 06/30/1994 TOTAL :	20.00	
				Total	65.00	
LF						

Checked By: _____ Date: 11/10/1996
 Approved By: _____ Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
QUANTITY BOOK ITEM SUMMARY

QB Page 157.00

Project Name:	LACONIA, NHS-018-2 (104), 99999		
Item Number:	604.16	Appropriation Code:	PAR
Item Description:	CATCH BASIN TYPE F		
Contract Price:	\$1,400.00	Contract Quantity:	1.00 U
		B&E Quantity:	1.10 U

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
DN 1-04	RT	05/11/1994	Sump/ riser installed DN #4	0.75*	0.75	2
			ESTIMATE # 2 05/01/1994 – 05/15/1994 TOTAL :	0.75		
DN 1-04	RT	06/18/1994	Frame/grate installed DN #4	0.15	0.90	5
DN 1-04	RT	06/18/1994	Basin cleaned pay remaining DN #4 Measured depth 8.6 ft = 1.1 units Previously paid 0.9, pay 0.2	0.20	1.10	5
			ESTIMATE # 5 06/15/1994 – 06/30/1994 TOTAL :	0.35		
Total					1.10 U	

Checked By: _____ Date: 11/10/1996Approved By: _____ Date: 11/10/1996

*The % of the unit paid upon installation of the sump and riser section should be mutually acceptable to the Contract Administrator and contractor. It may also vary based on the depth of the structure. (i.e.: 16' deep CB = 2.0 units; pay 0.75 X 2 = 1.5 units).

NOTE: If requested, the contractor is entitled to payment for materials on hand per specificatin 109.07. If so, the % paid upon installation must be adjusted accordingly.

Print Date: 07/05/1994

State Of New Hampshire Department Of Transportation
QUANTITY BOOK ITEM SUMMARY

QB Page 169.00

Project Name:	LACONIA, NHS-018-2 (104), 99999		
Item Number:	619.1	Appropriation Code:	PAR
Item Description:	MAINTENANCE OF TRAFFIC		
Contract Price:	\$10,000.00	Contract Quantity:	1.00 U
		B&E Quantity:	1.00 U

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	Est.
DE	RT	04/30/1994	Estimated 10 estimates for project, pay 0.10 per estimate.	0.10	0.10	1
DE	RT	ESTIMATE # 1 05/15/1994	04/16/1994 – 04/30/1994 TOTAL : Pay 0.10	0.10 0.10	0.20	2
DE	RT	ESTIMATE # 2 05/31/1994	05/01/1994 – 05/15/1994 TOTAL : Pay 0.10	0.10 0.10	0.30	3
DE	RT	ESTIMATE # 3 06/15/1994	05/16/1994 – 05/31/1994 TOTAL : Pay 0.10	0.10 0.10	0.40	4
DE	RT	ESTIMATE # 4 06/30/1994	06/01/1994 – 06/15/1994 TOTAL : Pay 0.10	0.10 0.10	0.50	5
		ESTIMATE # 5	06/16/1994 – 06/30/1994 TOTAL :	0.10		
Total					0.50 U	

Checked By: _____ Date: 07/05/1994
 Approved By: _____ Date: 07/05/1994

SECTION 805 – SAMPLE FIELD NOTEBOOK PAGES

Shown on the following pages are illustrations of acceptable methods of note keeping in bound field notebooks. See Section 802.2.A of this manual for suggested numbering of field books. Below is a list of examples that are included on the following pages.

DISCRIPTION

Roadway Notebook Examples (RN1)

- Cover Page
- Table Of Contents
- Silt Fence
- Humus
- Slope Seed
- Straight Granite Slope Curb
- Spot Checks

Drainage Notebook Example (DN1)

- Drainage Spot Checks and Basin Depths

Laconia
NHS-018-2(104) 99999

RN1

This book is the property of
and
if found please return to:

The State of New Hampshire
Department of Transportation
Construction Bureau
John O. Morton Building
Concord, NH 03302-0483
(603) 271-2571

Ronald Tanner, Contract Adm.
(603)555-5555

Table of Contents		RN1-1
Page #	Description	Item #
02	Silt Fence	645.531
03	Humus	647.1
04	" "	" "
05	Slope Seed Type 45	644.44
06	Straight Granite Slope Curb	609.21
07	Spot Checks	

Silt Fence

RN 1-02

118 ft

174 ft To QB + RB
MM 3/22/96

56 ft

<u>226 ft</u>	To QB + RB
RT 3/29/96	

2006

800-27

Division 800

Item 647.1 Humus				RN 1-03			
STA	Width	Avg.	Dist.	Area	Depth 3.5"	Volume	
506+95 Rt.	0 ft	2 ft	25 ft	50 ft ²	0.29 ft	14.5 ft ³	
506+70	4	8	25	200	0.29	58	
506+45	12	10	20	200	0.29	58	
506+25	8	12	25	300	0.29	87	
506+00	16	12	25	300	0.29	87	
505+75	8	8	20	160	0.29	46.4	
505+55	8	18	10	180	0.29	52.2	
505+45	28	20	10	200	0.29	<u>58</u>	
505+35	12						
Page Total =						461.1 ft3 to RN1-4	

Item 647.1 Humus					RN 1-04		
STA	Width	Avg.	Dist.	Area	Depth	Volume	
505+35	12						
		12	100	1200	0.29	348 ft ³	
504+35	12						
		14	25	350	0.29	101.5	
504+10	16						
		8	10	80	0.29	<u>23.2</u>	
504+00	0						
Page Total=						472.7 ft ³	
Item total: RN 1-03 =						461.1	
RN 1-04 +						<u>472.7</u>	
						933.8 ft ³	
933.8 ft ³ /27 =						<u>34.6 yd³</u>	
						To QB+RB	
						RT 4/5/96	

Item 644.45

RN 1-05

Slope Seed Type 45

4/22/96 Slope seed 45 placed from
Sta 504+00 - 506+95 Rt over
humus on RN 1-03 & RN 1-04

From RN 1-04:

Total Humus placed = 933.8 ft³

Area = Volume/Depth

= 933.8 ft³/0.29 ft = 3220 ft²3220 ft²/43560 = 0.074 acres

Per Spec. 644.2.3.1 80 lbs/acre

80 x 0.074 = 5.92 lbs To QB + RB
MM 4/23/96

Item 609.21			RN 1-06
Straight Granite Slope Curb			
4/16/96			
Location	Curb Mark	Measured Quantity	Comments
Main St.	A1	149.6 ft	Set up of the curbing items in a RN field book may also be accomplished by cutting and pasting the plan summary into the field book or by creating a separate Record Book page.
	A2	18.7	
	A3	72.3	
	A4	381.4	
	A5	189.0	
	A6	70.8	
Mill St.	B1	270.6	Added 11 ft. to reach catch basin
	B2	37.8	
School St.	C1	44.2	
	C2	73.6	
	C3	106.2	
	C4	85.2	
Item Total =		<u>1499.4 ft</u>	To QB + RB MM 4/23/96

[illegible]

DRAINAGE SPOT CHECKS

5/15/95 Delivery of 48" RCP cast on
4/30/95, within spec.

6/22/95 DN #6, Plan grate elev. =
100.66, measured 100.56.

BASIN DEPTH CHECKS

7/25/95 DI (Unit Depth Spec.
604.5.1.2)

Item 604.12 DN #1, M.D. = 4.8 ft
4.8/5.0 = 0.96 u
DN #2, M.D. = 5.6 ft
5.6/5.0 = 1.12 u

CB (Unit Depth Spec.
604.5.1.1).

Item 604.15 DN #3, M.D. = 7.2 ft
7.2/8.0 = 0.9 u

Item 604.16 DN #4, M.D. = 9.3 ft
9.3/8.0 = 1.16 u

NOTE: CB's and DI's labeled as "special" should
be reviewed for unit depth, subsidiary excavation,
etc. This information may be found in the contract
Special Provisions for this item.

DN 1-33OK, *RT*OK, *MM*

Pay = 1.0 u to RB Page 155.00

MM

Pay = 1.1 u to RB Page 155.00

MM

Pay = 1.0 u to RB Page 156.00

MM

Pay = 1.2 u to RB Page 157.00

*MM****Ronald Tanner*** 8/01/95

SECTION 806 – GUIDELINES PERTAINING TO THE RECORD BOOK

806.1 – ITEM APPLICATIONS

The following are suggested satisfactory methods of handling some of the major items. *Engineering Audit Guidelines* to these and other items may be found in Appendix D of the Engineering Audit Process Manual included under Section 808 of this manual.

A. Final Pay Items:

Final Pay (F) items are designated with an “(F)” following the item description. Contract Administrators should refer to the Standard Specifications for Road and Bridge Construction section 109.11 for a complete definition of Final Pay (F) items. Final Pay (F) item quantities are estimated quantities. The estimated bid quantity of a Final Pay (F) item is the quantity to be paid when the item is completed. The pay quantity remains the estimated bid quantity even if there is an error between the estimated bid and the actual constructed or placed quantity. There are two exceptions to this rule:

- A quantity adjustment (increase or decrease) to the estimated bid quantity will be made if a physical change to the item is ordered in the field by the Contract Administrator. In this case only the quantity involved with the change is calculated. Then the quantity of the change is either added or deducted from the Final Pay (F) item quantity.
- A quantity adjustment (increase or decrease) to the estimated bid quantity will be made if either the actual quantity is more than 125 percent or less than 75 percent of the estimated bid quantity for Final Pay (F) items, or the value of the actual quantity is more than or less than \$10,000.00 of the estimated bid quantity value.

These items may have multiple partial payment entries in the Quantity Book. The Record Book should have only one entry for the “per plan Final Pay (F) quantity”, and then separate entries for any physical changes ordered by the Contract Administrator or quantity adjustments as stated above.

B. Unit Items:

Unit items, such as item 619.1 Maintenance of Traffic may be paid for and recorded as follows: All unit items should have partial payment entries made in the Quantity Book based on the number of estimates. There should be one entry for the “per plan quantity” in the Record Book upon completion of the item. Unit item 645.7 Erosion and Sediment Control Stormwater Management Plan, and item 692 Mobilization are to be paid for as spelled out in the Standard Specifications under “Basis of Payment” specification 645.5.6 and 692.5.1, respectively.

C. Excavation:

1. Common Excavation:

Before excavation is started, measure any material that is not included in the cross-sections. “Excavation not covered by cross-sections” may include excavation of stonewalls, boulders, ledge outcrops, sawdust piles, hummocks, etc.

Also, measure obvious depressions or cellar holes that are not covered by the cross-sections. The total of these volumes should appear as an addition or deduction on the common excavation Record Book Item page. The Contract Administrator should inspect excavation areas on the project for these projections and depressions to determine those that are of sufficient size to materially affect the sectioned quantity. Projections and depressions of less than 5 cubic yards (4 cubic meters) seldom have a net effect that is uncompensated for by the average end area method used to compute the excavation quantity.

2. Topsoil and Muck:

Topsoil excavation applies to fill sections only. Material from cut sections should not be recorded with such quantities of topsoil. If a grade change is made in a topsoil area, state whether the change was made before or after topsoil removal. Topsoil depth measurements should be taken at appropriate intervals to accurately produce the average topsoil thickness (e.g. 50 foot (20m) intervals with varying lateral off-sets.). If the topsoil layer varies considerably, cross-sectioning of the removal area is warranted. Where the average depth method is used, show the various depth checks, their locations, and the measurements used to produce the average depth. NOTE: When topsoil depths exceed 2 feet (0.6 m), per specification 203.2.4, it is reclassified as muck and should be measured and paid for separately per specification 203.5.1.4.

3. Unclassified Excavation:

On projects where excavation is unclassified or has been unclassified by the contractor so that regular ledge sections are not required, the Contract Administrator shall provide elevations of the ledge on 50 foot (20 m) sections in the area where the ledge slope line intersects the top of the ledge. A lack of stripping may make this difficult at times; however, even an approximate elevation will be an aid to the Engineering Audit Section in computing final quantities of excavation through ledge areas that results in considerable over breakage. See Paragraph 203.3.4 of the Standard Specifications for more information.

4. Material Measured in Vehicles:

Load Count Procedure: Load count is not recommended for measuring material in vehicles. However, when it becomes necessary to take load counts, set up a separate page in the Record Book or in a bound field notebook showing the following in detail in order to substantiate the quantity of the material paid for.

- The actual dimension of the load: This is the sum of the water level capacity of the carrying vehicle plus the average dimension of the heap. Note that the front and rear dimensions of some trucks may vary.
- The volume, in cubic yards (cubic meters) per vehicle load: Show computations for each type of vehicle used. The quantity to be paid for when measured by Load Count will be 80% of the loose volume of the load.
- The total number of loads for each type of vehicle.
- The total volume, in cubic yards (cubic meters) delivered.

D. Embankment-in-Place:

Contract Administrators are reminded that a review of Section 203 of the Standard Specifications will provide the pertinent information necessary for embankment-in-place payment. Embankment-in-Place is a Final Pay (F) item and should follow the requirements discussed under section 806.1.A of this manual.

The contractor should be provided with a pit information form for each pit used. See that the form is properly filled out and included in the project records. **Pit and Disposal Agreements must be obtained prior to any material arriving on or leaving from the site if required.** Contract Administrators are advised to check with their District Construction Engineer if they believe these agreements are not required prior to material arriving on site.

E. Base Materials:

Base materials, such as sand, gravel, and crushed gravel, that are not Final Pay (F) items may be entered in the Record Book as “built per plan”, and the following statement shall be made on the page and signed by the Contract Administrator:

“This is to certify that this item was built per plan and that sufficient measurements and checks were made to verify substantial adherence to the plan dimensions. Measurements, computations and adjustments were made where changes occurred.”

Signed _____

There should be sufficient “spot check” information in the field notebooks to validate the above statement.

Many base material items are Final Pay (F) items and should follow the requirements discussed under section 806.1.A of this manual.

F. Bituminous Pavement:

Compile delivery slips each day in numerical order. With conventional plants, check the tally of the total tons delivered on each slip. Adding machine tape or an Excel spreadsheet totaling the tonnages is only required when loads are split between projects; split between item numbers; or an adjustment to the total on the slip must be made. A note should be made whenever the slip tonnage is not the pay tonnage total. Record Book entries should show slip numbers with a date and total tonnage used and paid as shown on the slip.

Slips prepared by the paving contractor or subcontractor must be made out in an acceptable manner and contain the following: the type of material being delivered; the contractor; the project for which shipment is scheduled; the date; and truck identification. Gross, tare, and net weights, and the weigher’s signature are also required if material is being obtained from a conventional plant (the weigher must be a sworn weigher).

G. Drainage:

Set up the bound field notebook with the idea in mind that the computation will be completed directly in this book. Leave some pages blank in the back of the book for additional notes and computations. The totals as computed should be transferred directly to the appropriate Record Book item summary page made out for each item and cross-referenced. When the computations become too extensive, such as with various breakdowns of common and rock

structure excavation, the notes may be carried to a Record Book page or a cross-section roll and computed there with proper cross-referencing.

Record all measurements necessary to the plotting of structures on the Record Plans, such as offsets from centerline, flow line elevations at outlets and inlets, etc. Record swing ties to ends of all conduits, buried pipe sleeves, water gates, service boxes, etc. Locate these items by centerline stations, but use other permanent features for tie points. For projects with coordinate points, the coordinates may also be useful.

Diagrams of related structures on each field notebook page are not required, but may be used if needed for clarity. When used, diagrams shall show the items on that page in solid lines, and related structures recorded elsewhere shown in dotted lines with the page number indicated.

For excavation more than 9 feet (2.7 m) deep, common structure excavation will be measured and paid. See Section 903 of this manual for a diagram of pipe pay limits.

When boulders are encountered in excavating for any structure, be sure to note in what class of excavation they were found. See standard specification 206.4.1.1 for further clarification. Boulders from the subsidiary portion are not deductible from common excavation. Other boulders are deductible from the appropriate class of common excavation.

If widened ditches are added, plot the design of the ditches on cross-sections of Record Plans and note how the pay limits are to be defined.

When conditions necessitate non-standard end structures, submit complete dimensioned sketches with computations.

H. Granite Curb:

Measurements for curb, fence and other items paid for by the foot (meter) may also be recorded and totaled in the bound field books. Page totals for these measurements are then transferred directly to the Record Book item summary page.

Keep track of reset curb quantities and where reset was used. If possible, keep new and reset curb runs separate. Avoid mixing and matching.

I. Uniformed Officers and Flaggers:

Create a Uniformed Officer and Flagger Time Report to include the names of the workers and the time worked daily. It is recommended that the contractor use a similar report to be given to the Contract Administrator at the end of each day or week. The two reports together provide a checks and balance system for verifying police invoices and flagger hours actually worked. Officer and flagger personnel should be scheduled and ordered by the contractor. However, the Contract Administrator should work closely with the contractor to make sure the appropriate coverage is provided (not too little or too much). Payment for uniformed officers is by invoice plus a 5% mark-up per specification 618.5.1. Payment for flaggers is to be based on the actual hours worked per specification 618.5.2.

J. Loam and Humus:

Loam and Humus measurements may be recorded, computed and totaled in the bound field notebooks or on separate computation pages in the Record Book. Page totals should be transferred directly to the Record Book item summary page where a total quantity is compiled. It should be noted that any excavation required to accommodate loam or humus is considered incidental. Also, when the item of embankment-in-place is included in the contract, no deduction will be made from embankment-in-place for the volume of loam or humus obtained from sectioned areas. The quantity of loam or humus provided from non-sectioned areas will be added

to embankment-in-place.

K. Mulch:

Measurements of mulch should be recorded and computed in a bound field notebook or on separate computation pages in the Record Book. Individual page totals should then be transferred to the Record Book item summary page where the total quantity is compiled. Slope measurements recorded in the field notebooks or on separate computation pages in the Record Book should be computed in acres (hectares) or square yards (square meters) as required.

L. Spot Checks:

Field personnel are instructed to record a portion of the checks made in their normal course of work in determining if materials and work are in accordance with plans and specifications. It is recognized by this Department that a majority of the field work is a process of constant checking by various methods of sound engineering practice. However, we have been asked to record a portion of this normal checking and inspection to be designated as spot checks. No minimum or maximum number of spot checks will be required. A fair cross-section of project items should be included and the frequency of the recorded checks should reflect the level of activity throughout the life of the project.

It is suggested that these spot checks be recorded on pages set aside for this purpose in the back of the bound field notebooks. Entries are to be made in the field notebook corresponding to the item being checked. Information to be recorded to substantiate spot checks should include at least the item number, location, type of check or method of measurement used, and any general remarks to denote the condition of work or materials. Adjacent to the above information should be recorded the conditions or dimensions to satisfy the plans and specifications. In addition, the date and person's name or initials performing the check should be recorded.

Items checked should not be limited only to regular every day checks. Some spot checking should be done on materials and work that are usually accepted as a matter of fact.

M. Miscellaneous:

For checking in the Record Book and in the bound field notebooks only light and dark red pencil should be used. All other colors should be reserved for use of by the Engineering Audit Section.

Indexing and cross-indexing is an essential part of completing records; therefore, always show where information is being forwarded, as well as the sources of information recorded.

There are many items that were not included in the descriptions above. However, most of these items can be treated in a manner similar to the items illustrated. Although it is left to the judgment of the Contract Administrator to adapt this system to unusual items, the above-outlined system should be used as much as possible for the sake of uniformity. In the case of unusual items, it is recommended to contact Engineering Audit for a suggested record system.

As stated previously, please review the *Engineering Audit Guidelines* found in Appendix D of the Engineering Audit Process Manual included under Section 808 of this manual.

SECTION 807 - SAMPLE RECORD BOOK

Shown on the following pages are samples of acceptable methods of record keeping for construction projects. Please note that in addition to these samples, additional instructions on some specific record keeping requirements are included in this section. File names have been included at the bottom of the pages that are available electronically. (It is recommended to combine road and bridge records into one record book when practical). The table of contents that follows, outlines a suggested page numbering system. This system is not required but suggested for consistency. The only requirement in the record system is that the numbering be unique and in sequence. No two pages should have the same number even if the road and bridge records are separated into two books.

RECORD BOOK FRONT PAGES

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION**

PROJECT RECORD BOOK

PROJECT NAME - Laconia
FEDERAL PROJECT NUMBER - NHS-018-2 (104)
NEW HAMPSHIRE PROJECT NUMBER- 99999
CONTRACTOR - Plow Brothers, Inc.
ADDRESS - P.O. Box 3, Concord, NH 03301
CONTRACT ADMINISTRATOR - Ronald Tanner

I hereby certify that these records are complete and correct to the best of my knowledge.

Signed: *Ronald Tanner*
Contract Administrator

Date: August 19, 1996

Chief Auditor: _____
Date: _____

TABLE OF CONTENTS

Division 800
Page No. 2.00

Engineering Personnel	3.00
Completion Data	4.00-4.11
Project Record Submission Checklist	5.00-5.01
Survey Notebook Index	6.00
Field Notebook Index (DN, BN, RN)	7.00
R.O.W. Special Agreements	8.00-8.01
Blasting Record	9.00
Item Index	10.00-10.02
Sub-contractor Approval	11.00-11.01
Authorization Letters	12.00
General Notes	13.00
Change Orders (include all alteration orders, Extra Work, S.A.'s)	14.00-14.02
Certificates of Compliance	15.00-15.02
Item Summary Pages (Items in sequential order with appropriation codes separated)	100.00
Extra Work Item Summary Pages	800.00
Supplementary Agreement Item Summary Pages	900.00

To maintain the uniformity of all records turned into the Engineering Audit Section, use the Table of Contents as shown and place the indicated articles in this sequence in your Record Book. Write none or separate folder in the page number column if not contained. Page numbering for bridge items typically start on page 500.00, especially if the bridge items are placed in a separate Bridge Record Book. However, if the bridge and road items are placed in a single Record Book, the items may be numbered in sequence.

ENGINEERING PERSONNEL

Name and Signature	Ini- tials	Address	Date	
			Arrived	Departed
Ronald Tanner <i>Ronald Tanner</i>	RT	18 Mill St. Hooksett, NH 555-7381	May 1, 1994 Mar. 15, 1995	Dec. 20, 1994 Aug. 19, 1996
Matthew Moore Mathew Moore	MM	RFD #3 Concord, NH 555-8086	May 3, 1994 Mar. 15, 1995	Dec. 20, 1994 Aug. 15, 1996
John Rice John Rice	JR	Log Rd. Bow, NH 555-1617	June 6, 1994 Mar. 15, 1995	Nov. 30, 1994 Dec. 3, 1995
Mark Bowles Mark Bowles	MB	14 Concord St. Manchester, NH 555-0500	April 16, 1995	June 5, 1996

Some Contract Administrators add a column to this page to include emergency contact numbers for each person on the job.

COMPLETION CERTIFICATE

RB Page No. 4.00

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATIONCOMPLETION CERTIFICATE
AND
CONTRACT TIME EXTENSION

Date: August 24, 1996

Project: Laconia

Numbers: NHS-018-2(104), 99999

Project Started:	<u>May 1, 1994</u>	Contractor:	<u>Plow Brothers</u>
Suspended:	<u>December 20, 1994</u>	Contract Administrator:	<u>Ronald Tanner</u>
Resumed:	<u>March 15, 1995</u>		
Contract Completion Date:	<u>November 27, 1996</u>	Working Days Used:	<u></u>
Project Completed:	<u>August 19, 1996</u>	Contract Working Days:	<u></u>
Date Granted:	<u>April 15, 1997</u>	Working Days Granted:	<u></u>

Total: 239 Calendar Days underrun.

Allowable Contract Extension Dates due to:

Weather: November 29, 1996Increase in Quantities: *Other: April 15, 1997

*Explanation:

Allow 10 working days extending the contract completion date from November 29, 1996 to April 15, 1997, due to extenuating circumstances involving delay in utility work; road profile grade changes; and storm sewer pipe replacement.

Liquidated damages from XXX to XXX inclusive in accordance with the Contract Provisions at \$ XXX/Day totals \$ XXX to be deducted from monies due to Contractor.

Gunnar Kelpie
District Construction Engineer

Administrator, Bureau of Construction

Distribution: Contract Administrator
Contract Administration
Engineering Audit
Federal Highway Administration

COMPLETION CERTIFICATE DATA
SUB-NORMAL PRODUCTIVITY LOG
AND NON-WORK DAYS DUE TO WEATHER

Project:

[illegible]

Ronald Tanner

Contract Administrator

August 20, 1996

Date

s:\c-manual\final rewrites\division 800 8-10-06.doc

Laconia 99999

Extensions of Contract Time

Month	August, 1996	Days	ov/ und
1			
2			
3	Saturday	X	
4	Sunday	X	
5			
6			
7			
8			
9			
10	Saturday	X	
11	Sunday	X	
12			
13			
14			
15			
16			
17	Saturday	X	
18	Sunday	X	
19	Project Completion		Under
20			1
21			2
22			3
23			4
24	Saturday	X	5
25	Sunday	X	6
26			7
27			8
28			9
29			10
30			11
31	Saturday	X	12

Laconia 99999

Extensions of Contract Time

Month	September, 1996	Days	over/ under
1	Sunday	X	13
2	Holiday – Labor Day	X	14
3			15
4			16
5			17
6			18
7	Saturday	X	19
8	Sunday	X	20
9			21
10			22
11			23
12			24
13			25
14	Saturday	X	26
15	Sunday	X	27
16			28
17			29
18			30
19			31
20			32
21	Saturday	X	33
22	Sunday	X	34
23			35
24			36
25			37
26			38
27			39
28	Saturday	X	40
29	Sunday	X	41
30			42

Laconia 99999

Extensions of Contract Time

Month	October, 1996	Days	over/ under
1			43
2			44
3			45
4			46
5	Saturday	X	47
6	Sunday	X	48
7			49
8			50
9			51
10			52
11			53
12	Saturday	X	54
13	Sunday	X	55
14	Holiday – Columbus Day	X	56
15			57
16			58
17			59
18			60
19	Saturday	X	61
20	Sunday	X	62
21			63
22			64
23			65
24			66
25			67
26	Saturday	X	68
27	Sunday	X	69
28			70
29			71
30			72
31			73

Laconia 99999

Extensions of Contract Time

Month	November, 1996	Days	over/ under
1			74
2	Saturday	X	75
3	Sunday	X	76
4			77
5			78
6			79
7			80
8			81
9	Saturday	X	82
10	Sunday	X	83
11	Holiday – Veteran’s Day	X	84
12			85
13			86
14			87
15			88
16	Saturday	X	89
17	Sunday	X	90
18			91
19			92
20			93
21	Holiday – Thanksgiving	X	94
22			95
23	Saturday	X	96
24	Sunday	X	97
25			98
26			99
27	Contract Completion Date		100
28	Begin Extension Period for Weather (2 days)	1	101
29	End Extension Period for Weather (2 days)	2	102
30	Saturday	X	103

Laconia 99999

Extensions of Contract Time

Month	December, 1996	Days	over/ under
1	Sunday	X	104
2	Begin Standard Winter Suspension Period	X	105
3		X	106
4		X	107
5		X	108
6		X	109
7	Saturday	X	110
8	Sunday	X	111
9		X	112
10		X	113
11		X	114
12		X	115
13		X	116
14	Saturday	X	117
15	Sunday	X	118
16		X	119
17		X	120
18		X	121
19		X	122
20		X	123
21	Saturday	X	124
22	Sunday	X	125
23		X	126
24		X	127
25	Christmas	X	128
26		X	129
27		X	130
28	Saturday	X	131
29	Sunday	X	132
30		X	133
31		X	134

Laconia 99999

Extensions of Contract Time

Month	January, 1997	Days	over/ under
1	Holiday - New Year's Day	X	135
2		X	136
3		X	137
4	Saturday	X	138
5	Sunday	X	139
6		X	140
7		X	141
8		X	142
9		X	143
10		X	144
11	Saturday	X	145
12	Sunday	X	146
13	Holiday – Martin Luther King	X	147
14		X	148
15		X	149
16		X	150
17		X	151
18	Saturday	X	152
19	Sunday	X	153
20		X	154
21		X	155
22		X	156
23		X	157
24		X	158
25	Saturday	X	159
26	Sunday	X	160
27		X	161
28		X	162
29		X	163
30		X	164
31		X	165

Laconia 99999

Extensions of Contract Time

Month	February, 1997	Days	over/ under
1	Saturday	X	166
2	Sunday	X	167
3		X	168
4		X	169
5		X	170
6		X	171
7		X	172
8	Saturday	X	173
9	Sunday	X	174
10		X	175
11		X	176
12		X	177
13		X	178
14		X	179
15	Saturday	X	180
16	Sunday	X	181
17		X	182
18		X	183
19		X	184
20		X	185
21	Holiday – President's Day	X	186
22	Saturday	X	187
23	Sunday	X	188
24		X	189
25		X	190
26		X	191
27		X	192
28		X	193

Laconia 99999

Extensions of Contract Time

Month	March, 1997	Days	over/ under
1	Saturday	X	194
2	Sunday	X	195
3		X	196
4		X	197
5		X	198
6		X	199
7		X	200
8	Saturday	X	201
9	Sunday	X	202
10		X	203
11		X	204
12		X	205
13		X	206
14		X	207
15	Saturday	X	208
16	Sunday	X	209
17		X	210
18		X	211
19		X	212
20		X	213
21		X	214
22	Saturday	X	215
23	Sunday	X	216
24		X	217
25		X	218
26		X	219
27		X	220
28		X	221
29	Saturday	X	222
30	Sunday	X	223
31		X	224

Extensions of Contract Time

Month	April, 1997	Days	Over/ under
1	End Standard Winter Suspension Period	X	225
2	Begin Ext. Period for Extenuating Circumstances (10 days)	1	226
3		2	227
4		3	228
5	Saturday	X	229
6	Sunday	X	230
7		4	231
8	Rain – Non-work day	X	232
9		5	233
10		6	234
11		7	235
12	Saturday	X	236
13	Sunday	X	237
14		9	238
15	End Ext. Period for Extenuating Circumstances (10 days)	10	239
16			
17			
18			
19	Saturday		
20	Sunday		
21			
22			
23			
24			
25			
26	Saturday		
27	Sunday		
28			
29			
30			
31			

PROJECT RECORD SUBMISSION CHECKLIST

RB Page No 5.00

DOCUMENT	CONTENT	CONTRACT ADMIN. CHECK	ENG. AUDIT RECEIVED
Record Book	Pages signed, numbered, cross-referenced and indexed.		
	Project identification on each page or attachment.		
	Ex. Work white copy in book signed by Contract Admin. & Contractor receipted bills included or explained.		
	Certificates of Compliance, check standard Specs for required form.		
	Pit information form included with pit page.		
Bridge (section of record book)	See above (except pit).		
Record Plans Road & Bridge	Revised to be "as built" plans check or change at least the following: drainage, base course depth (on profile), grade changes (on sections), drive locations checked or changed (on plan).		
Contract	Contract Administrator's official copy.		
Correspondence	Folder with at least the following letters pertaining to changes, laboratory "Record of Samples and Tests" with dates certificates received, letters authorizing opening of pits and overhaul, misc. documents not designated to be included elsewhere.		
Partial Est. & Bal. & Excess	Last paid Estimate, latest Balance and Excess.		
Daily Reports	(Carbons if applicable)		
Surface Treatment Slips	Identified, signed by receiver, credits indicated.		
Paving Slips	Identified, signed by receiver, splits indicated.		
Landscaping Slips	Fertilizer, Grass Seed, Mulch, etc. signed and identified.		
Bound Field Books (Number submitted)	Identified, indexed, entries signed, checked, dated and cross-referenced where information does not follow normal route.		

DOCUMENT	CONTENT	CONTRACT ADMIN. CHECK	ENG. AUDIT RECEIVED
Computation Rolls (No. sub- mitted).	Identification-Project & Content. Computed and checked by. Source notes cross-referenced.		
Field Survey Books	Must be turned over to Survey Sect.		
Quantity Book	“Daily Summary “ page for all contract items except those “Item Summary” pages used in the quantity book then placed in record book at end of project.		
Other	Turn in any misc. documents, maps, pictures, etc. If they have a definite value as source documents or final project records.		
Summary of Non-conforming Material	Form shown on Pg. _____(SNMT-93) date _____. (sent to Lab on “date”)		

SURVEY BOOKS INDEX

RB Page No. 6.00

Location	Traverse	Detail	Alignment	Orig. Sect.	Bounds	B.M.'s	Ties
Naylor St.	9952	9952					
Main St.	9952	9952	8925	8322			
N.B.	99582	9952	8164	8322	8925	9849	8925
S.B.	9952	9952	6259	8322	8164	9849	8164
Bridge					6259	9849	6259

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Division 800

FIELD NOTEBOOK INDEX

Book No.	Remarks
RN-1	Items 201.1 – 207.3
RN-2	Items 214 – 304.3
RN-3	Items 403.11 - 417
BN-1	Items 503.201 - 565.22
DN-1	Drainage note 1 - 15
DN-2	Drainage note 16 - 27

STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION

FROM: Elizabeth A. Pickering
Right-of-Way Agent

DATE: May 16, 1995
AT (Office): Bureau of Right-of-Way

SUBJECT: Special Agreements and Right-of-Way Negotiations
Laconia 99999

TO: Robert Jones, Administrator
Bureau of Construction

THRU: Louis W. Brissetta, Supervisor/Chief Agent of Land
Titles/Negotiations – Chief Right-of-Way Agent

Dear Bob:

Special Agreements have been entered into the following owners on the above-referenced project:

Parcel 8 – Brian L. Moira Stuart (964-9529 Home 926-8926 Moira Work)
Do not disturb Rhododendron Bushes southerly of Atlantic Avenue
construction center line Station 386+16.

Parcel 11 – Larry's Custom Interiors, Inc.
(964-6622 – Larry and Pam Lariviere)
Salvage to owners birch tree on slope of Atlantic Avenue construction
center line station 338+00 in 4 foot lengths.

Parcel 14 – MCC Realty Trust, Mary Carella, Trustee (964-1100)
Do not disturb the along the driveway approximately 60' southerly of
Atlantic Avenue construction center line station 389+75.

The following actions were taken in order to clear the right-of-way for construction:

<u>Parcel</u>	<u>Owner</u>	<u>Remarks</u>
8, 8A	Brian L. and Moira Stuart	Accepted offer –Executed Drainage Easements.
9	Michael C. Kelly	Accepted offer –Executed

Laconia 99999

May 16, 1995

<u>Parcel</u>	<u>Owner</u>	<u>Remarks</u>
10	Joseph and Nancy Kutt	Accepted offer –Executed Damage Release.
11	Larry’s Custom Interior’s Inc.	Accepted offer –Executed Slope Easement.
12	Boston and Maine Railroad	Accepted offer –Executed Slope Easement.
13	MCC Realty Trust	Accepted offer –Executed Drainage Easement

No other negotiations were performed on the above-referenced project.

EAP:faw

cc: Mark W. Richardson, Administrator, Bureau of Right-of-Way
James Moore, Project Manager
Contract Administrator

Project File – Right-of-Way

BLASTING RECORD

Location	Date	Time	Holes	Caps	Total lbs. of explosives	Remarks
Sta. 10+50	7/10/95	2:00 pm	48	48	96	No fly rock

2006

800-61

Division 800

ITEM INDEX

Item Number	Item Description	Page No.
201.1	CLEARING AND GRUBBING (F)	*100.00
201.21	REMOVING SMALL TREES	101.00
201.22	REMOVING LARGE TREES	102.00
202.41	REMOVAL OF EXISTING PIPE 0-600 mm DIA.	103.00
202.5	REMOVAL OF CATCH BASINS, DROP INLETS, AND MANHOLES	104.00
202.7	REMOVAL OF GUARDRAIL (F)	105.00
203.1	COMMON EXCAVATION	*106.00
203.5552	GUARDRAIL ELT PLATFORM	107.00
203.6	EMBANKMENT-IN-PLACE (F)	*108.00
206.1	COMMON STRUCTURE EXCAVATION	109.00
209.201	GRANULAR BACKFILL (BRIDGE) (F)	110.00
209.4	GRANULAR BACKFILL (GRAV)	111.00
214.	FINE GRADING	112.00
304.1	SAND (F)	113.00
304.2	GRAVEL (F)	114.00
304.3	CRUSHED GRAVEL (F)	115.00
304.32	CRUSHED GRAVEL FOR SHOULDER LEVELING	116.00
304.35	CRUSHED GRAVEL FOR DRIVES	117.00
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	*118.00
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	119.00
403.99	TEMPORARY BITUMINOUS PAVEMENT	120.00
417.	COLD PLANING BITUMINOUS SURFACES (F)	121.00
502.	REMOVAL OF EXISTING BRIDGE STRUCTURE	122.00
503.201	COFFERDAMS	123.00
504.1	COMMON BRIDGE EXCAVATION (F)	*124.00
504.2	ROCK BRIDGE EXCAVATION	*125.00
508.	STRUCTURAL FILL	126.00
510.1	PILE DRIVING EQUIPMENT	127.00
510.61	FURNISHING & DRIVING STEEL BEARING PILES	128.00

* Asterisks denote items included in
this sample Record Book.

RB Page No. 10.01

510.65	DRIVING-POINTS FOR STEEL BEARING PILES	129.00
520.0102	CONCRETE CLASS AA, (QC/QA) (F)	130.00
520.12	CONCRETE CLASS A ABOVE FOOTINGS (F)	131.00
520.213	CONCRETE CLASS B, FOOTINGS (ON SOIL) (F)	132.00
520.7002	CONCRETE BRIDGE DECK (QC/QA) (F)	133.00
534.3	WATER REPELLENT (SILANE- SILOXANE) (F)	134.00
536.11	EPOXY COATING FOR CONCRETE (F)	135.00
537.	CONCRETE SEALER (F)	136.00
538.2	BARRIER MEMBRANE, VERTICAL SURFACES (F)	137.00
538.6	BARRIER MEMBRANE, WELDED BY TORCH- MACHINE METHOD	138.00
541.2	PVC WATERSTOPS, NH TYPE 2 (F)	139.00
544.	REINFORCING STEEL (F)	*140.00
544.2	REINFORCING STEEL, EPOXY COATED (F)	141.00
544.21	REINFORCING STEEL, EPOXY COATED MECHANICAL CONNECT	142.00
547.	SHEAR CONNECTORS (F)	143.00
548.21	ELASTOMERIC BEARING ASSEMBLIES (F)	144.00
550.1	STRUCTURAL STEEL (F)	145.00
550.2	BRIDGE SHOES (F)	146.00
561.110	PREFABRICATED EXPANSION JOINT, TYPE A (F)	147.00
563.22	BRIDGE RAIL T2 (F)	148.00
565.22	BRIDGE APPROACH RAIL T2 (F)	149.00
570.4	MORTAR RUBBLE MASONRY (F)	150.00
585.21	STONE FILL, CLASS B (BRIDGE)	151.00
585.3	STONE FILL, CLASS C	152.00
593.23	HIGH STRENGTH GEOTEXTILE, NON-WOVEN	153.00
603.00215	15 INCH R.C. PIPE, CLASS III	*154.00
604.0007	POLYETHYLENE LINER	155.00
604.12	CATCH BASINS TYPE B	156.00
604.16	CATCH BASINS TYPE F	*157.00
606.140	BEAM GUARDRAIL (STANDARD SECTION- WOOD POSTS) GR-1	158.00
606.1452	BEAM GUARDRAIL (TERMINAL UNIT TYPE ELT)	159.00
606.147	BEAM GUARDRAIL (TERMINAL UNIT TYPE G-2) GR-147	160.00
606.95	TEMPORARY TRAFFIC CONTROL BARRIER	161.00
609.01	STRAIGHT GRANITE CURB	*162.00
609.3	STRAIGHT GRANITE CURB (BRIDGE)	163.00
615.03	TRAFFIC SIGN TYPE C (F)	164.00
615.034	RELOCATING TRAFFIC SIGN, TYPE C	165.00

615.064	RELOCATING TRAFFIC SIGN TYPE CC	166.00
616.161	TRAFFIC SIGNALS (TEMP.)	167.00
618.61	UNIFORMED OFFICERS WITH VEHICLE	*168.00
619.1	MAINTENANCE OF TRAFFIC	*169.00
621.2	RETRO REFLECTIVE BEAM GUARDRAIL DELINEATOR	170.00
621.31	SINGLE DELINEATOR WITH POST	171.00
622.1	STEEL WITNESS MARKERS	172.00
622.2	CONCRETE BOUNDS	173.00
628.22	SAWED BITUMINOUS PAVEMENT (BRIDGE)	174.00
632.0104	RETRO REFLECTIVE PAINT PAVEMENT MARKING, 4 INCH LINE	175.00
632.1145	PREFORMED RETRO REFLECTIVE TAPE, TYPE 1 REMOVABLE	176.00
632.4145	RETROREFLECTIVE PREFORMED THERMOPLASTIC PAVEMENT MARKING	177.00
641.	LOAM	178.00
642.	LIMESTONE	179.00
643.11	FERTILIZER FOR INITIAL APPLICATION	180.00
643.21	FERTILIZER FOR REFORTIFICATION	181.00
644.45	SLOPE SEED (WF) TYPE 45	182.00
644.82	SALT-TOLERANT GRASS SEED, TYPE 82	183.00
645.119	MULCH WITH TACKIFIERS	184.00
645.24	CHANNEL STABILIZATION (HIGH VELOCITY)	185.00
645.3	EROSION STONE	186.00
645.52	RYEGRASS FOR TEMPORARY EROSION CONTROL	187.00
645.531	SILT FENCE	188.00
645.7	EROSION AND SEDIMENT CONTROL STORMWATER MANAGEMENT	189.00
645.71	MONITORING EROSION AND SEDIMENT CONTROL	190.00
646.3	TURF ESTABLISHMENT WITH MULCH AND TACKIFIERS	191.00
647.1	HUMUS	*192.00
692.	MOBILIZATION	193.00
693.	ON-THE-JOB TRAINING OF UNSKILLED WORKERS	*194.00
699.	TEMPORARY PROJECT WATER POLLUTION CONTROL	*195.00
1010.11	PRICE ADJUSTMENT, DIESEL FUEL	196.00
1010.12	PRICE ADJUSTMENT, GASOLINE	*197.00
1010.2	PRICE ADJUSTMENT, ASPHALT CEMENT	*198.00
1010.41	PAY ADJUSTMENT, CONCRETE QC/QA ITEMS	199.00
.01	EXTRA WORK: REMOVE AND REPLACE STONE MASONRY	*800.00
.80	MISCELLANEOUS OFFICE SUPPLIES	*801.00
612.2248	48 INCH RCP, CLASS III WITH NEOPRENE GASKET	*900.00

REV. 1/96

RB Page No. 11.00TRANSMITTAL REQUEST FOR CONSENT TO SUBLET**X** SUBCONTRACTORLOWER TIER SUBCONTRACTOR
_____STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION
BUREAU OF CONSTRUCTION
P.O. BOX 483-ROOM 119
CONCORD, NEW HAMPSHIRE
TELEPHONE (603) 271-2571
FAX (603) 271-3461Prime Contractor: Plow Brothers, Inc.(Name and Address)
_____Subcontractor: Tree Cutting Unlimited(Name and Address)
_____Lower-tier Subcontractor:(Name and Address)
_____Project Name and Number: Laconia, NHS-018-2 (104), 99999All contract items sublet are to be shown in the following tabulation. Estimated or agreed dollar amounts must be shown individually in the appropriate ~~PARTIAL~~ or ~~COMPLETE~~ column.

ITEM NUMBER	DESCRIPTION OF ACTUAL WORK TO BE PERFORMED	PARTIAL	COMPLETE
201.1	Clearing and Grubbing 17 acre		\$255,000

TOTAL SUBCONTRACT AMOUNT: \$ \$255,000By: Chris Plow, AdministratorMay 5, 1994

Signature and Title of Prime Contractors Agent

Date

Signatory agrees and understands that subcontracts will contain, by inclusion or reference, all the pertinent provisions of the Prime Contract. It is further agreed and understood that consent to sublet shall not under any circumstance relieve the Prime Contractor or surety of any of their obligations under the Contract or bonds as specified in the State of New Hampshire Standard Specifications for Road and Bridge Construction. **DO NOT****WRITE BELOW THIS LINE**

EFFECTIVE DATE:	May 20, 1994	CONSENT BY:
TOTAL SUBLET TO DATE: \$	\$255,000	Shelly Volan ADMINISTRATIVE ASSISTANT
PERCENT SUBLET TO DATE: %	10%	
CONSENT NUMBER: 1		

PRIME CONTRACTOR

LABOR COMPLIANCE

CONTRACT ADMINISTRATOR FHWA
NHDOT 5/91**FOR INFO ONLY****RB Page No. 11.01**

Policy on Subcontracting

State of New Hampshire--Department of Transportation--Bureau of Construction

Subcontract work proposed to be authorized by the Department can only be initiated and requested by the prime (principal) contractor. Authorization of a subcontract operation is provisional and does not imply Departmental recognition of the subcontractor, nor attest to their skill, experience, or ability to perform such work. No contractual relationship between the Department and a subcontractor is created thereby.

1. The Prime Contractor shall perform with its own organization contract work amounting to not less than 50 percent of the total original contract price. "Its own organization" shall be construed to include only workers employed and paid directly by the Prime Contractor and equipment owned or rented by the Prime Contractor, with or without operators.
2. In extending authorization, the Department does not waive its responsibility, or that of the Prime Contractor, for carrying out every procedure to ensure compliance in all respects with the provisions of the Federal Aid Highway Act, State Law, local ordinances, and all regulations having jurisdiction. The Prime Contractor may be required to take over or complete the work of any subcontractor who fails to perform work on time or in a satisfactory manner. Additionally, when such work involves a DBE, Department approval to substitute will be conditional upon a written release from the DBE. It is a condition of authorization that a subcontractor shall not again sublet any part of their work unless the Prime Contractor has obtained prior approval of the Department. Indicated subcontract authorization is tentative pending full compliance by the Prime Contractor with Subsection 108.01 of the Standard Specifications for Road and Bridge Construction, entitled "Subletting of Contract" and/or Amendments to Section 108.01 as may be included in the Contract Proposal.
3. The Prime Contractor shall retain responsibility to fulfill all requirements of the "Contract and Documents Included Therein", "Conditions of the Obligation of the Contract Bond", and any requirements as to workmanship or maintaining a working relationship with representatives of the Contract Administrator. The "Required Contract Provisions - Federal Aid Contracts" and the "Minimum Wage Rates" for labor as stated in the Contract Proposal and all other pertinent Federal requirements must be incorporated in each subcontract agreement and shall apply to labor performed on all work sublet, assigned, or otherwise disposed of in any way.
4. It is the Prime Contractor's responsibility to furnish to each material supplier, subcontractor or lower tier subcontractor all pertinent portions of the contract and to ensure that all contract requirements are carried out which pertain to that portion of the work assigned to or performed by others. This includes the payment of wages at rates not less than the applicable minimum, and all bills for labor, materials, and equipment as may be required in the Contract Documents.
5. Modifications to normal subcontracting procedures for emergency work, added work, and work incidental to acceptable construction methods, deemed to be in the best interest of the Department, will be subject to review by the Construction Bureau Administrator or appointed on a case by case basis.

STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION

FROM: John Smith, P.E.
Chief of Final Design

DATE: June 5, 1995
AT (Office): Bureau of Highway Design

SUBJECT: Laconia
99999

TO: Ronald Tanner, P.E.
Bureau of Construction

MEMORANDUM

The Bureau of Highway Design has reviewed your request to revise the proposed guardrail design for guardrail run No. 2, Sta. 1520+80 – 1522+40. Since the 4:1 slope now begins at 1522+00 (instead of at 1522+25) we agree with shortening the proposed guardrail length by 25 feet.

GENERAL NOTES**1. 203.6 Embankment-in-place:**

SB 1532+00+/- Lt. A pipe inlet was discovered in a bowl area at the toe of slope and no outlet could be found. R. Tanner ordered the inlet area to be filled with roadway excavation obtained from either side of the bowl to form a ditch such that the hole would be filled and water would run past the filled area into a pipe located at SB 1530+25+/- Lt. See RN1-6.

2. 609.5 Reset Granite Curb

Existing reset curb did not exist from SB 1425+04 – SB 1430+04 Rt. (Minus 500 ft.)
Required an addition of 609.01 Straight Granite Curb. (Plus 500 ft.)

3. Drainage-1

Several existing metal drainage pipes to be replaced were excavated and found to be in excellent condition. It was determined that any rust damage that had occurred was located in the area of the catch basin and that 6 to 8 feet away from the basin the pipe looked like new. The decision was made by R. Tanner not to replace any pipe runs that were not showing signs of salt damage at the basin and if they were, to only replace the portion of the run that was showing signs of damage.

4. Drainage-2

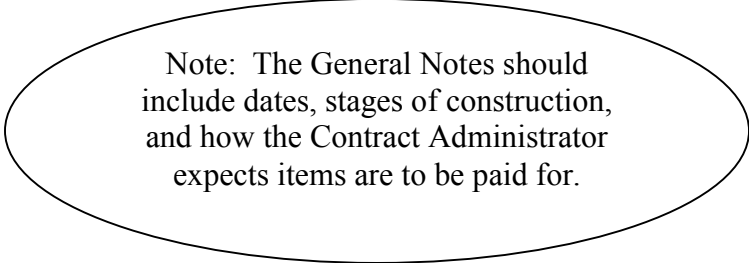
Rock Structure Excavation quantities were lower than plan because design had underdrain pipes in the ledge cuts at 9 feet when actual depths were ± 6 feet.

5. Drainage-3

Drainage runs #35 and #41 replaced 30 inch pipe not shown on the plans (see change order #6).

6. Drainage-4

Aggregate underdrain was added to the project to solve an icing problem maintenance was having in the ditch line NB Rt. Sta. 1645+00 to 1653+00 (See added Drainage runs #A9, A10, A11, and A38).



Note: The General Notes should include dates, stages of construction, and how the Contract Administrator expects items are to be paid for.

0

RB Page No. 14.00

FCO 05/95<\$10.00

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF CONSTRUCTION**

July 1, 1995

To: **Plow Brothers Inc.** You are hereby notified to perform the following work in accordance with the provisions of your contract with the Department dated **April 19, 1994**.

☐ Alteration Order # ☒ Extra Work Order # ☐ Supplementary Agreement

Laconia

NHS-018-2 (104)

99999

Project Name

Federal No.

State No.

Payment will be made by: ☐ Bid Prices ☐ Agreed Prices ☒ Force Account

DESCRIPTION: Remove and reset stone masonry on Bridge #138/128.

REASON: See correspondence file #109, date 6/20/95.

Item No.	Description	Appn Code	Unit	Estimated Quantity	Unit Price		Estimated Cost
					Agreed	Per Bid	
0.01	Remove and Replace Stone Masonry	PAR	\$				\$1,500.00
	Labor:			\$600.00			
	Equipment:			\$850.00			
	Materials (grout)			\$50.00			
TOTAL							\$1,500.00

Federal Participation

Requested:

Yes

S.A. Accepted by: _____

Contract Extension Granted: N/A

Approved by: _____

Working Days Authorized: 0

Contractor's Representative

CHANGE ORDER #

1

Ronald Tanner

NHDOT Contract Administrator

Original in Record Book____ Copy to Contractor____ Copy to FHWA for Information____

FCO 05/95<\$10,000

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF CONSTRUCTION**

August 2, 1995

To: Plow Brothers Inc. You are hereby notified to perform the following work in accordance with the provisions of your contract with the Department dated April 19, 1994.

☒ Alteration Order # 1 ☐ Extra Work Order # ☐ Supplementary Agreement

LaconiaNHS-018-2 (104)99999

Project Name

Federal No.

State No.

Payment will be made by: ☒ Bid Prices ☐ Agreed Prices ☐ Force Account

DESCRIPTION: Raise grade between stations 8+40 and 10+60 Naylor St. as follows: Move P.I. from Sta. 8+80 (specified on Plans) to Sta. 8+65, elevation 67.48 with a 90 ft. V.C. Change V.C. to 30 ft. at P.I. Sta. 10+40.

REASON: To obtain better drainage and increase stability over area with poor subsoil conditions. Also, to intercept seepage from right and to accommodate excessive run-off.

Item No.	Description	Appn Code	Unit	Estimated Quantity	Unit Price		Estimated Cost
					Agreed	Per Bid	
203.1	Common Excavation	033	cy	800		\$0.95	\$760.00
203.6	Embankment					\$0.65	\$715.00
	<div>This is not a Supplementary Agreement (SA) so the contractor's signature is not required. However, obtaining the contractor's signature is helpful in avoiding future time delay claims relative to this change order by having a signed agreement to the number of</div>						
					TOTAL		\$1475.00

Federal Participation
Requested:

Yes

S.A. Accepted by:

Contract Extension Granted: Yes

Approved by:

Working Days Authorized:

1

CHANGE ORDER #

2

Contractor's Representative

Ronald Tanner

NHDOT Contract Administrator

Original in Record Book ____ Copy to Contractor ____ Copy to FHWA for Information ____

FCO 05/95>\$10,000

RB Page No. 14.02

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF CONSTRUCTION**

May 3, 1996

To: Plow Brothers Inc. You are hereby notified to perform the following work in accordance with the provisions of your contract with the Department dated April 19, 1994.

☒ Alteration Order # 2 ☐ Extra Work Order # ☒ Supplementary Agreement

LaconiaNHS-018-2 (104)99999

Project Name

Federal No.

State No.

Payment will be made by: ☒ Bid Prices ☐ Agreed Prices ☐ Force Account

DESCRIPTION: (1) Between Sta. 21+40 & 24+60, wreck existing 24 x 36 inch oval brick sewer. (2) Omit 18 x 24 inch RCP storm sewer on the easterly side of Main St., between the above stations. (3) From Sta. 21+40 - 22+60 install 48 inch RCP Class III storm sewer. From Sta. 22+60 - 24+60 install 36 inch RCP Class III storm sewer.

REASON: Existing oval brick sewer found to be in poor condition and to lie at such an elevation as to raise doubts that the new work can be carried out without severe structural damage thereto.

Item No.	Description	Appn Code	Unit	Estimated Quantity	Unit Price		Estimated Cost
					Agreed	Per Bid	
206.1	Common Structure Excavation	033	cy	1874		\$2.00	\$3748.00
612.2290	36 inch RCP	033	ft	188		\$43.50	\$8178.00
S.A. 612.2248	48" RCP w/ Neoprene Gasket	033	ft	118	\$66.50		\$7847.00
604.12	C.B. Type B	033	U	5		\$250.00	\$1250.00
604.3	Manholes	033	U	6		\$300.00	\$1800.00
TOTAL							\$22,823.00

Federal Participation

Requested: Yes S.A. Accepted by: Plow Brothers Inc.

Contract Extension Granted: Yes Approved by: John Plow, Superintendent

Working Days Authorized: 2
CHANGE ORDER # 3 Ronald Tanner
District Construction Engineer

Original in Record Book ____ Copy to Contractor ____ Copy to FHWA for Information ____

State Of New Hampshire Department Of Transportation
Certificates Of Compliance Summary

Project: **Laconia, NHS-018-2 (104), 99999**Contractor: **Plow Brothers Inc.**

Item Number	Item Description	Certificates Received	Quantity Paid	Quantity Certified	File Number
510.61	FURNISHING & DRIVING STEEL BEARING PILES	0	57,647.00	All	1
510.65	DRIVING-POINTS FOR STEEL BEARING PILES	0	93.00	All	2
520.0031	PRECAST CONCRETE ARCHED FRAME	1	1.00	All	28
534.3	WATER REPELLENT (SILANE-SILOXANE) (F)	0	195.00	All	3
536.11	EPOXY COATING FOR CONCRETE (F)	0	40.55	All	34
537.	CONCRETE SEALER (F)	0	117.00	All	4
538.2	BARRIER MEMBRANE, VERTICAL SURFACES (F)	0	107.00	All	5,6,7,8,26
538.6	BARRIER MEMBRANE, WELDED BY TORCH- MACHINE METHOD	0	520.00	All	36
541.2	PVC WATERSTOPS, NH TYPE 2 (F)	0	0.00	All	9
541.4	PVC WATERSTOPS, NH TYPE 4 (F)	0	31.00	All	10
541.5	PVC WATERSTOPS, NH TYPE 5 (F)	0	15.00	All	11
544.	REINFORCING STEEL (F)	0	37,850.00	All	12
544.2	REINFORCING STEEL, EPOXY COATED (F)	0	27,112.00	All	13
544.21	REINFORCING STEEL, EPOXY COATED MECHANICAL CONNECT	0	187.00	All	14
547.	SHEAR CONNECTORS (F)	0	1,114.00	All	35
548.21	ELASTOMERIC BEARING ASSEMBLIES (F)	0	5.00	All	15,22
550.1	STRUCTURAL STEEL (F)	0	69,610.00	All	16,29
550.2	BRIDGE SHOES (F)	0	5.00	All	17,23
561.110	PREFABRICATED EXPANSION JOINT, TYPE A (F)	0	15.00	All	18
563.22	BRIDGE RAIL T2 (F)	0	96.70	All	19,32
565.22	BRIDGE APPROACH RAIL T2 (F)	0	35.00	All	20,33
593.23	HIGH STRENGTH GEOTEXTILE, NON-WOVEN	0	789.60	All	38
603.00204	375 mm R.C. PIPE, CLASS III	0	88.20	All	57
603.00205	450 mm R.C. PIPE, CLASS III	0	14.70	All	58
603.34105	450 MM STEEL END SECTION	0	0.00	All	
603.83203	300 MM PLASTIC PIPE (SMOOTH INTERIOR)	0	23.00	All	39
603.83204	375 MM PLASTIC PIPE (SMOOTH INTERIOR)	0	111.10	All	40
603.83205	450 MM PLASTIC PIPE (SMOOTH INTERIOR)	0	36.80	All	41

State Of New Hampshire Department Of Transportation
Certificates Of Compliance Summary

Project: **Laconia, NHS-018-2 (104), 99999**
 Contractor: **Plow Brothers Inc.**

Item Number	Item Description	Certificates Received	Quantity Paid	Quantity Certified	File Number
604.12	CATCH BASINS TYPE B	0	8.85	All	52
604.16	CATCH BASINS TYPE F	0	1.50	All	53
606.140	BEAM GUARDRAIL (STANDARD SECTION- WOOD POSTS) GR-1	0	233.00	All	42
606.1452	BEAM GUARDRAIL (TERMINAL UNIT TYPE ELT)	0	3.00	All	43
606.147	BEAM GUARDRAIL (TERMINAL UNIT TYPE G-2) GR-147	0	1.00	All	44
606.95	TEMPORARY TRAFFIC CONTROL BARRIER	0	583.00	All	21
615.03	TRAFFIC SIGN TYPE C (F)	0	6.67	All	30,31
616.161	TRAFFIC SIGNALS (TEMP.)	0	0.95	All	25
621.2	RETROREFLECTIVE BEAM GUARDRAIL DELINEATOR	0	14.00	All	45
621.31	SINGLE DELINEATOR WITH POST	0	63.00	All	46
622.1	STEEL WITNESS MARKERS	0	0.00	All	47
622.2	CONCRETE BOUNDS	0	0.00	All	48
622.4	STONE BOUNDS	0	0.00	All	49
632.0110	RETRO REFLECTIVE PAINT PAVEMENT MARKING, 100 mm LINE	0	3,458.50	All	37
632.0145	RETRO REFLECTIVE PAINT PAVEMENT MARKING, 450 mm LINE	0	12.10	All	54
632.1145	PREFORMED RETRO REFLECTIVE TAPE, TYPE 1 REMOVABLE 4	0	7.20	All	55
645.22	SLOPE STABILIZATION (STEEPER THAN 2:1)	0	840.08	All	50
645.23	CHANNEL STABILIZATION (LOW VELOCITY)	0	412.05	All	51
670.101	TEMPORARY LIGHTING	0	2.66	All	27
670.95	TEMPORARY SAFETY FENCE	0	596.00	All	24

Actual certificates can be placed
 in a separate folder or included in
 the record book. This index can
 be created by CMS.

ORGANIZATION LETTERHEAD
(Manufacturer, Supplier, or Contractor)CERTIFICATE OF COMPLIANCE
(Manufactured or Fabricated Material)Date Aug 8, 1996WE HEREBY CERTIFY THAT Tri-Cote
Description, Kind of Material, or Trade NameFurnished to Structures Unlimited (Sub.)
Contractor (Prime or Sub.)Delivered and Used on:
Bridge # 175/25 @ Laconia NHS-018-2 (104) 99999
Project Name Federal No. State No.Used for Item No. 534 Tri-Cote
Name of ItemManufactured by T.G. Products Corp.Supplied by Boyd's & Company

MEETS THE REQUIREMENTS OF THE PERTINENT PROJECT PLANS, SPECIAL PROVISIONS AND SPECIFICATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDP) IN ALL RESPECTS. PROCESSING, PRODUCT TESTING, AND INSPECTION CONTROL OF RAW MATERIALS ARE IN CONFORMANCE WITH ALL APPLICABLE SPECIFICATIONS, DRAWINGS AND STANDARDS OF ALL ARTICLES FURNISHED.

All records and documents pertinent to this certificate and not submitted herewith will be maintained available by the undersigned for a period of not less than three years from the date the Project has been completed and accepted.

T.G. Products Corp
(Manufacturer, Supplier, or Contractor)Signed by Sam Bynum Title District Manager
(Officer of Organization)Subscribed and sworn to before me this 8th day of August, 1996.Trevor C. Booker My Commission Expires: April 15, 1997
Notary Public/Justice of the Peace

(For more than one item, list each Item No., Item name, Manufacturer, or Supplier or both)

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 100.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	201.1	Appropriation Code:	PAR
Item Description:	CLEARING AND GRUBBING (F)		
Contract Price:	\$14,000.00	Contract Quantity:	0.95 AC
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RN 1-04	RT	08/11/1994	Cleared and Grubbed per plan no quantity changes.	0.95	0.95

=====

Item Total: 0.95 AC

Checked By: MM Date: 11/10/1996
 Approved By: RT Date: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	201.1	Appropriation Code:	PAR
Item Description:	CLEARING AND GRUBBING (F)		
Contract Price:	\$14,000.00	Contract Quantity:	0.95 AC
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	
Contract Estimate:				0.95 AC	Final Estimate:	0.95 AC

Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **100.0 %**

Remarks:

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 106.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	203.1	Appropriation Code:	PAR
Item Description:	COMMON EXCAVATION		
Contract Price:	\$5.82	Contract Quantity:	9800.00 CY
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DesignCom	RT	10/27/1995	Sta 1508+00 to 1512+50	5035.00	5,035.00
DesignCom	RT	10/22/1996	Driveways Parcel #4 and #8	208.00	5,243.00
DesignCom	MM	10/22/1996	Sta 1502+70 to 1506+90	4547.00	9,790.00
RN 1-12	RT	11/01/1996	Change in cut slope Sta 1560+70 for improved site distance from drive at Sta 1560+40	210.00	10,000.00

Item Total: 10,000.00 CY

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

Excavation not covered by cross-sections and rock excavation (boulders) should **not** be considered one in the same. Excavation not covered by cross-sections is measured before actual excavation starts and includes any mounds or objects above the ground surface that are not shown on the cross-sections. Boulders (rock excavation) are measured in their entirety and are deducted from common excavation measurements, if included.

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	203.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	COMMON EXCAVATION		
Contract Price:	\$5.82	Contract Quantity:	9800.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:				9,800.00 CY	Final Estimate: 10,000.00 CY

Final Estimate Within Acceptable Percentage: [X]

Percent Of Contract Amount Used: 102.0 %

Remarks:

The design computations were spot checked and used for payment quantities. The rounding of 10 CY in the design computations was not paid. Additional material was removed from the slope to improve site distance for the abutter (See RN 1-12 for measurements).

Rev. 3/97

RB Page 106.02

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
DISPOSAL AGREEMENT**

(This does not apply to disposal areas operated by a public agency)

Project Laconia Project Number(s) 99999

Property Owner(s) L.M. Moody Location 61 Highland St.

This form sets forth the conditions under which the Department will approve the disposal of surplus or waste material by a Contractor who, under contract as an agent of the Department, seeks to open and operate a disposal site on the referenced property in accordance with Section 106, 201 and 203 of the New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction applicable to the referenced project.

By signature herein, the Contractor (agent) and the property owner(s) acknowledge and agree to the following conditions and specifications subject to Departmental approval:

(1) Prior to the start of disposal operations, this agreement shall be executed by the Contractor, the property owner(s), and the Department's Contract Administrator, with written approval received from the Department.

(2) The Contractor shall not dispose of material considered to be hazardous or injurious to public welfare, including contaminated soils and asbestos, except as permitted by federal, state, and local regulations. Solid waste shall be disposed of according to all federal, state, and local regulations.

(3) Prior to the start of disposal operations, the Contractor shall complete a Historic and Archaeological Resources certification in accordance with the Contract, for areas affected by the disposal or by any haul road constructed for access to the disposal area.

(4) Prior to the start of disposal operations, the Contractor shall investigate impacts on existing wetlands by arranging for a qualified person recognized by the Department of Environmental Services (NHDES) capable of performing such an investigation. The Contractor shall apply for, and receive from the NH Wetlands Bureau, any wetlands permit(s) required prior to the start of disposal operations.

(5) Pursuant to Executive Order 11988, dated May 24, 1977, the Contractor shall not dispose of materials within the boundaries of any floodway, or within the limits of any 100 year floodplain, or within any area that violates Executive Order 11988 without the expressed written permission of appropriate federal, state, and local agencies. It shall be the responsibility of the Contractor to ascertain and mark the boundaries of such floodway and floodplain using available information from federal, state, and local resources.

(6) Approval by the Department to open and operate the disposal area will expire at the specified or extended completion date of the project. Access roads to the area adjacent to highways shall be obliterated unless permission is given by the Department to preserve such access roads. If the Contractor has removed screening trees and brush between the highway and the disposal area, the area shall be replanted to provide a similar screen in a zone along the edge of the disposal area as directed by the Department.

(7) Disposal or transportation of material by the Contractor shall not be exempt from local zoning or other applicable ordinances. The Contractor shall apply directly to local municipalities for possible exemptions to such ordinances.

(8) Disposal of brush from clearing and grubbing operations shall be as specified in Section 201 of the Standard Specifications. Disposal of surplus and waste material from roadway excavation shall be as specified in Section 203 of the Standard Specifications. Reclamation of the disposal area shall meet the requirements of **RSA 155-E:5, I, II, III, IV, and V** (for excavation sites) prior to Project Acceptance.

RB Page 106.03

Prior to acceptance of the project, the Contractor shall finish the disposal area in accordance with the noted RSA's and applicable specifications. By the box(es) checked below, the property owner(s), the Contractor, and the Department's Contract Administrator shall agree on the specific minimum landscaping treatment required in order for the reclamation to be acceptable to the Department:

☒ The entire area is to be fertilized and seeded.

☐ The entire area is to be planted with seedlings.

☐ Part of the area is to be seeded and the remainder planted with seedlings as agreed below.

Seedlings shall be _____

(Age or size, species, variety)

planted 8 feet center to center, or _____ (Spacing).

Additional landscaping required and any pertinent information desired to be a part of the official record is ☐ attached, or ☐ noted below:

Landscaping provisions approved by: **Ronald Tanner** **5/8/96**

NHDOT Contract Administrator

Date

The Contractor's attention is directed to **RSA 482-A:3**, the requirements of which must be fulfilled if this disposal area involves excavation or dredging of wetlands. Furthermore, the Contractor's attention is directed to **RSA 483-B** and **RSA 485-A:17**, the provisions of which must be fulfilled if this disposal operation involves filling on the border of the surface waters of the state or will significantly alter the characteristic natural runoff or create an unnatural runoff, and **RSA 149-M** if the Contractor intends to dispose of solid waste, including stumps. The Contractor's attention is also directed to Section 10 of the Rivers and Harbors Act of 1899, and Sect. 401 & 404 of the Clean Water Act, for which compliance may require a permit for work in or affecting "navigable waters of the U.S.," or material placed in "waters of the U.S.," including wetlands. The Contractor's attention is also directed to Executive Order 11990 if this disposal area will affect wetlands.

Lawrance Moody **5/5/96**

Signature of Owner Date

Name(s) of Joint Owner(s)

61 Highland St

Street

Street

Laconia, NH

Town

State

Town

State

Plow Brothers, Inc.

Contractor

John Plow **5/8/96**

By (Signature)

Date

If joint owners are involved, the Owner signing should give all other names and addresses. Separate forms should be filed in connection with adjacent owners.

Distribution: ☐ Contract Administrator ☐ Construction Bureau

☐ Property Owner

☐ Contractor

☐ Environmental Coordinator

Plow Brothers, Inc
P.O. Box 3
Concord, NH 03301

RE: Laconia, NHS-018-2(104, 99999

Gentlemen:

Conditional approval is hereby granted to open and operate a disposal area on the L.M. Moody property, subject to the following stipulations:

1. Operation of the disposal area will be limited to referenced project and shall be in conformance to the "Disposal Agreement" form dated May 8, 1996.
2. It is understood that the property will be restored in accordance to the landscaping provisions of the above mentioned agreement.
3. A written release from the owner will be required for the Contract Administrator's records prior to acceptance of the project.
4. It is mutually understood that this approval shall terminate upon completion of referenced project, anticipated to be November 27, 1996.
5. The approval hereby granted is contingent upon and shall not relieve the contractor/property owner from obtaining State and Federal permits as may be required by, but not necessarily limited to, RSA 149:8-a, RSA 149-M, RSA 483-A, Sect. 9 and 10 of the River and Harbor Act and Sect. 404 of the Clean Water Act.

Your attention is directed to the Administrative Rules and Regulations Part WS 415 implementing RSA 149:8-a. Compliance may require applicable permits if the area is in or adjacent to surface waters of the State; or if the area disturbs more than 10 000 m² (1 ha) of ground surface by excavation, topsoil removal or by other means.

At present, the Waste Management Division requires that a permit (RSA 149-M:10) be obtained for all stump disposal sites.

Very truly yours,

Gunnar Kelpie

Gunnar Kelpie, P.E.
District Construction Engineer

GUK/sev
Attachment
CC: Contract Administrator, Ronald Tanner
See Agreement Distribution

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 108.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	203.6	Appropriation Code:	PAR
Item Description:	EMBANKMENT-IN-PLACE (F)		
Contract Price:	\$3.40	Contract Quantity:	7887.00 CY
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	10/27/1996	Embankment-In-Place plan quantity no changes.	7887.00	7887.00
RN1-6	RT	10/27/1996	Add 3.0 cy to Final Pay. Filled in hole at SB ±1532 LT.	3.00	7890.00

=====

Item Total : 7890.00 CY

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

Contract Administrators are
 cautioned to exercise a rigid control
 on materials being transported to
 waste areas.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 108_01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	203.6	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	EMBANKMENT-IN-PLACE (F)		
Contract Price:	\$3.40	Contract Quantity:	7887.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
<hr/>					
Contract Estimate:				7890.00 CY	Final Estimate: 7890.00 CY

Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **100.0 %**

Remarks:

Rev. 4/97

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
PIT AGREEMENT**

RB Page 108.02

(This form does not apply to commercial processing plants)

Project Laconia Project Number(s) 99999

Pit (#) Name A.L. Jones (#1) City/Town Route 106 Laconia

This form sets forth the conditions under which the Department will approve material removal by a Contractor who, under contract as an agent of the Department, seeks to open and operate any pit for the lawful construction, reconstruction, or maintenance of a class I, II, III, IV, or V highway in accordance with **RSA 155-E:2, IV** and as specified in Section 106 of the New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction applicable to the referenced project.

By signature herein, the Contractor (agent) and the property owner(s) acknowledge and agree to the following conditions and specifications subject to Departmental approval:

(1) Prior to the start of excavation, a copy of this agreement executed by the property owner(s), the Contractor, and the Department will be filed with the Regulator (as defined by **RSA 155-E:1, III**) within the municipality or unincorporated place in which the pit is located.

(2) Prior to the start of excavation, the Contractor shall meet the requirements of **RSA 155-E:2, IV(b)** as follows:

(a) The excavation shall comply with the operational and reclamation standards of **RSA 155-E:4-a, RSA 155-E:5, and RSA-E:5-a.**

(b) The excavation shall not be within 50 feet of the boundary of a disapproving abutter or within 10 feet of the boundary of an approving abutter, unless requested by said approving abutter.

(c) The excavation shall not be unduly hazardous or injurious to the public welfare.

(d) Existing visual barriers in the areas specified in **RSA 155-E:3, III** shall not be removed, except to provide access to the excavation.

(e) The excavation shall not substantially damage a known aquifer, so designated by the United States Geological Survey.

(f) All required permits for the excavation should be obtained from state or federal agencies.

(3) Exemptions from the provisions of local zoning or other applicable ordinances may be requested by the Contractor through local municipalities. When such request are denied, with respect to the excavation or transportation of materials being used exclusively for the lawful construction, reconstruction, or maintenance of a class I, II, or III highway, the Contractor may appeal directly through the Transportation Appeals Board per **RSA 155-E: 2, IV(c).**

(4) Property owner(s) with excavation not meeting the permit-exempt requirements of **RSA 155-E: 2, IV** for highway excavations may be required to obtain a permit from the Regulator and meet the requirements of **RSA Chapter 155-E**, including the Minimum and Express Operational and Reclamation standards contained therein.

(5) Prior to pit excavation and before Project Completion the Contractor shall provide initial and final survey of the pit area by a New Hampshire licensed land surveyor. The total quantity of material removed from the pit shall be reported to the Department and the property owner(s) prior to Project Acceptance unless waived by written consent between involved parties.

(6) Approval by the Department to open and operate the pit will expire at the specified or extended completion date of the project. Access roads to pits adjacent to highways shall be obliterated unless permission is given by the Department to preserve such access roads. If the Contractor has removed screening trees and brush between the highway and the pit, the area shall be replanted to provide a screen in a zone along the edge of the pit as directed by the Department.

Prior to acceptance of the project, the Contractor shall finish the pit area in accordance with the noted RSA's and applicable specifications. By the box(es) checked below, the property owner(s), the Contractor, and the Department's Contract Administrator shall agree on the specific minimum landscaping treatment required in order for the reclamation to be acceptable to the Department:

- ☒ The entire area is to be seeded with slope seed as specified in New Hampshire Department of Transportation Standard Specification 644.
- ☐ The entire area is to be replanted with seedlings in accordance with accepted horticultural practice or as directed.
- ☐ The area is to be partly seeded and the remainder replanted with seedlings depending upon original condition of growth.
- ☐ Working face to be left operational; remainder of area to be ☐ seeded or ☐ replanted with seedlings.

Seedlings shall be _____

(Age or size, species, variety)

planted 8 feet center to center, or _____ (Spacing)

Additional landscaping required and any pertinent information desired to be a part of the official record is ☐ attached, or ☐ noted below:

Landscaping provisions approved by: *Ronald Tanner* 5/8/96

NHDOT Contract Administrator

Date

The Contractor's attention is directed to **RSA 482-A: 3**, the requirements of which must be fulfilled if this pit involves excavation or dredging of wetlands and to the provisions of **RSA 483-B** and **RSA 485-A: 17**, if this pit involves dredging or mining on the border of the surface waters of the State or will significantly alter the characteristic natural runoff or create an unnatural runoff. The Contractor's attention is also directed to Executive Orders 11988 and 11990 if this pit will affect floodplains or wetlands. The Contractor's attention is also directed to Section 10 of the Rivers and Harbors Act of 1899 and Section 401 & 404 of the Clean Water Act, for which compliance may require a permit for work in or affecting "navigable waters of the U.S.," or material placed in "waters of the U.S.," including wetlands. The Contractor is cautioned of the potential to encounter contaminated soils within the pit area and, if encountered, shall avoid incorporating contaminated soils within the limits of the project. Furthermore, the Contractor shall complete a Historic and Archaeological Resources certification in accordance with the Contract.

Adam Jones 4/21/96
Signature of Owner Date

Adams Jones
Name(s) of Joint Owner(s)

Box 536
Street

Street

Laconia, NH
Town State

Town State

Plow Brothers, Inc.
Contractor

John Plow 4/21/96
By: (Signature) Date

If joint owners are involved, the property owner signing should give all other names and addresses. Separate forms should be filed in connection with adjacent owners.

Note: The signing of this agreement does not constitute permission to commence excavation.

Written approval stating the effective date must be received from the Department.

Distribution: ☐ Contract Administrator ☐ Construction Bureau ☐ Engineering Audit
☐ Property Owner ☐ Contractor ☐ Municipality/Regulator
(via certified mail)

Plow Brothers, Inc.
P.O. Box 3
Concord, NH 03301

RE: Laconia, NHS-018-2(104, 99999

Gentlemen:

Conditional approval is hereby granted to open and operate a pit on the Adam Jones, Route 106, Laconia property, effective May 6, 1996, subject to the following stipulations:

1. Operation of the pit will be limited to referenced project and shall be in conformance to the "Pit Agreement Form" dated April 22, 1995.
2. It is understood that the property will be restored in accordance to the landscaping provisions of the above mentioned agreement.
3. A written release from the owner will be required for the Project Engineer's record prior to acceptance of the project.
4. It is mutually understood that this approval shall terminate upon completion of referenced project, anticipated to be November 27, 1996.
5. The approval hereby granted shall not supersede the authority of the Municipal Regulator given in RSA 155-E: 10, nor the provisions of RSA 155-E: 4 regarding prohibited projects.
6. The approval hereby granted is contingent upon and shall not relieve the contractor/property owner from obtaining State and Federal permits as may be required by, but not necessarily limited to, RSA 149:8-a, RSA 483 A, Sect. 9 and 10 of the River and Harbor Act and Sect. 404 of the Clean Water Act.

Your attention is directed to the Administrative Rules and Regulations Part WS 415 implementing RSA 149:8-a. Compliance may require applicable permits if the pit is in or adjacent to surface waters of the State; or if the pit disturbs more than 10 000 m² (1 ha) of ground surface by excavation, topsoil removal or by other means.

Very truly yours,

Gunnar Kelpie

Gunnar Kelpie, P.E.
District Construction Engineer

GUK/sev
Attachment

CC: Contract Administrator, Ronald Tanner
Town of Laconia, (cert. mail #13454)
Project Pit Folder, (Audit Section)
Owner, Adam Jones

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 118.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	403.11	Appropriation Code:	PAR
Item Description:	HOT BITUMINOUS PAVEMENT, MACHINE METHOD		
Contract Price:	\$40.00	Contract Quantity:	1,650.00 Tons
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
SLIPS	RT	10/20/1996	Paving invoice #'s 71130 - 71239 1.5 inch top.	830.6	830.6
SLIPS	RT	10/22/1996	Paving invoice #'s 70230 - 70239 1.5 inch top.	73.44	904.04
SLIPS	RT	10/22/1996	Paving invoice # 70224 2 inch binder.	2.72	906.76
SLIPS	RT	10/15/1996	Paving invoice #'s 67370 - 67410 2 inch binder.	711.34	1618.1
Item Total :					1618.1 Tons

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	403.11	Appropriation Code:	PAR
Item Description:	HOT BITUMINOUS PAVEMENT, MACHINE METHOD		
Contract Price:	\$40.00	Contract Quantity:	1,650.00 Tons
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:				1650.00 Tons	Final Estimate: 1618.1 Tons

Final Estimate Within Acceptable Percentage: [X]

Percent Of Contract Amount Used: 98.1 %

Remarks:

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 124.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	504.1	Appropriation Code:	PAR
Item Description:	COMMON BRIDGE EXCAVATION (F)		
Contract Price:	\$25.00	Contract Quantity:	1,700.00 CY
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	07/20/1995	Common Bridge Excavation per plan	1700.00	1700.00
BN 1- 06	RT	06/22/1995	Additional Excavation for 12" of structural fill.	73.44	1773.44
DE	RT	10/22/1995	Difference between actual Rock Ex. Quantity and plan quantity per specification 504.4.4 in the contract 60 – 25 = 35 CY	35.00	1808.44
DE	RT	10/22/1995	Round to nearest whole unit	-0.44	1808.00
Item Total :					1808.00 CY

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	504.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	COMMON BRIDGE EXCAVATION (F)		
Contract Price:	\$25.00	Contract Quantity:	1,700.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:				1,700.00 CY	Final Estimate: 1808.00CY

Final Estimate Within Acceptable Percentage: [X]

Percent Of Contract Amount Used: 106.4 %

Remarks:

The additional quantity of Common Bridge Excavation is due to the placement of structural fill to facilitate a suitable construction surface at the bottom of the footing and per the specification 504.4.4 for the reduced quantity of Rock Bridge Excavation encountered. (See RB 125.01)

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 125.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	504.2	Appropriation Code:	PAR
Item Description:	ROCK BRIDGE EXCAVATION		
Contract Price:	\$111.00	Contract Quantity:	60.00 CY
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
BN 1- 16	RT	06/22/1995	Boulders encountered in Bridge limits.	25.00	25.00

=====

Item Total : 25.00 CY

Checked By: MMDate: 11/10/1996Approved By: RTDate: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	504.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	ROCK BRIDGE EXCAVATION		
Contract Price:	\$111.00	Contract Quantity:	60.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:			60.00 CY	Final Estimate:	25.00 CY

Final Estimate Within Acceptable Percentage: ☐ ☐

Percent Of Contract Amount Used: **41.7 %**

Remarks:

Fewer boulders were encountered than anticipated by Design. The remaining Quantity of 35 CY will be paid under item 504.1 per specification 504.4.4 (See RB 124.00).

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 140.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	544.	Appropriation Code:	PAR
Item Description:	REINFORCING STEEL (F)		
Contract Price:	\$1.25	Contract Quantity:	37,284.00 LBS
		Certificate Of Compliance:	Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	10/20/1996	Reinforcing steel final pay quantity.	37,284.00	37,284.00
BN 1-37	MM	10/22/1996	Bar-*mark #5B22 was incorrectly drawn and dimensioned to be 2' – 3" short. An additional bar was added (#5B22a) to achieve the required development length	73.44	37,357.44
DE	RT	10/22/1996	Round to the nearest whole unit	-0.44	37,357.00
Item Total :					37,357.00 LBS

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	544.	Appropriation Code:	PAR
Item Description:	REINFORCING STEEL (F)		
Contract Price:	\$1.25	Contract Quantity:	37,284.00 LBS
		Certificate Of Compliance:	Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:				37,284.00 LBS	Final Estimate: 37,357.00 LBS

Final Estimate Within Acceptable Percentage: [X]

Percent Of Contract Amount Used: 100.2 %

Remarks:

An additional bar was added (#5B22a) for the required development length (See BN 1-37).

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 154.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	603.00215	Appropriation Code:	PAR
Item Description:	15 INCH R.C. PIPE, CLASS III		
Contract Price:	\$28.60	Contract Quantity:	65.00 LF
		Certificate Of Compliance:	Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DN 1-06	RT	07/20/1995	Drainage Note # 04 Sta 1540+33 -1540+50 Rt.	17.00	17.00
DN 3-24	RT	06/22/1995	Drainage Note # 106 Sta 1562+11 Lt – 1562+14 Rt.	44.20	61.20
DN 3-64	RT	10/22/1994	Existing cross pipe at 1510+84 replaced.	45.00	106.20

=====

Item Total 106.20LF

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	603.00215	Appropriation Code: PAR	Certificate Of Compliance: Required
Item Description:	15 INCH R.C. PIPE, CLASS III		
Contract Price:	\$28.60	Contract Quantity:	65.00 LF

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
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Contract Estimate:	65.00 LF	Final Estimate:	106.20LF
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Final Estimate Within Acceptable Percentage: ☐ ☐

Percent Of Contract Amount Used: **189.5 %**

Remarks:

Existing cross pipe at Sta 1510+84 was found to be partially collapsed and was replaced. See DN 3-64 for more specific details.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 157.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	604.16	Appropriation Code:	PAR
Item Description:	CATCH BASIN TYPE F		
Contract Price:	\$1,400.00	Contract Quantity:	2.00 U
		Certificate Of Compliance:	Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DN 1-33	MM	07/20/1995	Drainage Note # 4: Sta 1540+50 Rt. Measured Depth 9.3 ft/ 8 ft = 1.2 units	1.20	1.20

=====

Item Total : 1.20 U

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	604.16	Appropriation Code: PAR	Certificate Of Compliance: Required
Item Description:	CATCH BASIN TYPE F		
Contract Price:	\$1,400.00	Contract Quantity:	2.00 U

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:				2.00 U	Final Estimate: 1.20 U

Final Estimate Within Acceptable Percentage: ☐ ☐

Percent Of Contract Amount Used: **55.0 %**

Remarks:

Drainage Note #26 was changed to a CB-B due to the proximity of the driveway. See DN 1-34 and RB 156.00.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 162.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	609.01	Appropriation Code:	PAR
Item Description:	STRAIGHT GRANITE CURB		
Contract Price:	\$29.05	Contract Quantity:	1500.00 LF
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 162.02	RT	07/20/1995	Final Measured quantity = 1499.4 LF	1499.40	1499.40

=====

Item Total : 1499.40 LF

Checked By: MMDate: 11/10/1996Approved By: RTDate: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	609.01	Appropriation Code:	PAR
Item Description:	STRAIGHT GRANITE CURB		
Contract Price:	\$29.05	Contract Quantity:	1500.00 LF
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity	
Contract Estimate:				1500.00 LF	Final Estimate:	1499.40 LF

Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **100.0 %**

Remarks:

CURB SUMMARY

Curb Mark	Design Quantity	Measured Quantity	Comments
A1	150	149.6	
A2	20	18.7	
A3	70	72.3	
A4	380	381.4	
A5	190	189.0	
A6	70	70.8	
B1	275	270.6	
B2	35	37.8	
C1	45	44.2	
C2	70	73.6	
C3	95	106.2	Added 11 ft. to reach catch basin
C4	85	85.2	
Rounding	15	0	
Total	1500	1499.4	To RB Pg. # 162.00, 7/20/95 RT

Measured By: MMDate: 7/20/95Checked By: RTDate: 7/20/95

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name:	LACONIA, NHS-018-2 (104), 99999	Certificate Of Compliance:	Not Required
Item Number:	618.61	Appropriation Code:	PAR
Item Description:	UNIFORMED OFFICERS WITH VEHICLE		
Contract Price:	\$	Contract Quantity:	\$50,000.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 168.03	MM	08/26/1994	State Police invoice # 7661 Dated 08/13/1994	1,076.25	\$1,076.25
RB 168.04	MM	09/26/1994	State Police invoice # 7662 Dated 09/26/1994	2,000.00	\$3,076.25
RB 168.05	MM	10/26/1994	State Police invoice # 7663 Dated 10/26/1994	2,000.00	\$5,076.25
RB 168.06	MM	11/26/1994	State Police invoice # 7664 Dated 11/26/1994	2,000.00	\$7,076.25
RB 168.07	MM	12/26/1994	State Police invoice # 7665 Dated 12/26/1994	2,000.00	\$9,076.25
RB 168.08	MM	04/26/1995	State Police invoice # 7666 Dated 04/26/1995	2,000.00	\$11,076.25
RB 168.09	MM	05/26/1995	State Police invoice # 7667 Dated 05/26/1995	2,000.00	\$13,076.25
RB 168.10	MM	06/26/1995	State Police invoice # 7668 Dated 06/26/1995	2,000.00	\$15,076.25
RB 168.11	MM	07/26/1995	State Police invoice # 7669 Dated 07/26/1995	2,000.00	\$17,076.25
RB 168.12	MM	08/26/1995	State Police invoice # 7670 Dated 08/26/1995	2,000.00	\$19,076.25
RB 168.13	MM	09/26/1995	State Police invoice # 7671 Dated 09/26/1995	2,000.00	\$21,076.25
RB 168.14	MM	10/26/1995	State Police invoice # 7672 Dated 10/26/1995	2,000.00	\$23,076.25
RB 168.15	MM	11/26/1995	State Police invoice # 7673 Dated 11/26/1995	2,000.00	\$25,076.25
RB 168.16	MM	12/26/1995	State Police invoice # 7674 Dated 12/26/1995	2,000.00	\$27,076.25
RB 168.17	MM	01/26/1996	State Police invoice # 7675 Dated 01/26/1996	2,000.00	\$29,076.25
RB 168.18	MM	02/26/1996	State Police invoice # 7676 Dated 02/26/1996	2,000.00	\$31,076.25
RB 168.19	MM	03/26/1996	State Police invoice # 7677 Dated 03/26/1996	2,000.00	\$33,076.25
RB 168.20	MM	04/26/1996	State Police invoice # 7678 Dated 04/26/1996	2,000.00	\$35,076.25
RB 168.21	MM	05/26/1996	State Police invoice # 7679 Dated 05/26/1996	2,000.00	\$37,076.25
RB 168.22	MM	06/26/1996	State Police invoice # 7680 Dated 06/26/1996	2,000.00	\$39,076.25
RB 168.23	MM	07/26/1996	State Police invoice # 7681 Dated 07/26/1996	2,000.00	\$41,076.25

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 168,01

Project Name	LACONIA, NHS-018-2 (104), 99999		Certificate Of Compliance: Not Required
Item Number:	618.61	Appropriation Code: PAR	
Item Description:	UNIFORMED OFFICERS WITH VEHICLE		
Contract Price:	\$	Contract Quantity:	\$50,000.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 168.24	MM	08/26/1996	State Police invoice # 7682 Dated 08/26/1996	2,000.00	\$43,076.25
RB 168.25	MM	09/26/1996	State Police invoice # 7683 Dated 09/26/1996	2,000.00	\$45,076.25
RB 168.26	MM	10/26/1996	State Police invoice # 7684 Dated 10/26/1996	2,000.00	\$47,076.25

=====

Item Total : \$47,076.25

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	618.61	Appropriation Code:	PAR
Item Description:	UNIFORMED OFFICERS WITH VEHICLE		
Contract Price:	\$	Contract Quantity:	\$50,000.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
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Contract Estimate:	\$50,000.00	Final Estimate:	\$47,076.25
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Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **94.2 %**

Remarks:

STATE OF NEW HAMPSHIREDepartment of Safety
Concord, NH 03305

Invoice Number: 7661

Invoice Date: 08/13/1994

Customer #: 67

PO#:

Plow Brothers Inc.
P.O. Box 3
Concord NH, 03301

Billing Period: 8/1/96 – 8/7/96

Description	Billable Time (Hours)	Hourly Rate	Billable Amount
New Hampshire State Police Detail(s)	20.5	\$50.00	\$1,025.00
Total Amount Owed:			\$1,025.00

\$1025.00 Plus 5% for contractor = \$ 1076.25

To RB Pg. #168.00, 8/26/94 MM

All police invoices and supporting
documents may be put in a
separate folder to reduce bulk in the
Record Book

Failure to remit within 45 days will result in termination of future services rendered.

Make check payable to State of New Hampshire
Forward check to:
NH Department of Safety
James Hayes Building
10 Hazen Drive, Concord, NH 03305

STATE OF NEW HAMPSHIRE
DEPARTMENT OF SAFETY
DIVISION OF STATE POLICE

Page No. **168.03A**Seq. #: No. 99999Detail Split with 998
Unit #**PAID DETAIL VOUCHER**

This voucher is to be completed by the State Police employee performing the below authorized Paid Detail. Upon Completion, it is to be submitted with the corresponding Weekly Duty Report and forwarded to Headquarters.

NAME Chris Jones RANK TRP ID# 999 TROOP ADATE OF DETAIL 8/1/94 TIME DETAIL BEGAN 07:00 TIME DETAIL ENDED 12:00TOTAL HOURS 5.0 TOTAL MILEAGE 14 VEH. EQ.# 9999WORK DESCRIPTION Traffic control Laconia

REQUESTING CO.: JOB # _____

NAME Plow Brothers

ADDRESS _____

ATTENTION: _____

I certify that the above named State Police
Employee worked the date and hours indicated.

John Plow

Co. Foreman or Supervisor

I certify that I worked the above date and hours
while on:

☒

DAY OFF

☐

ANNUAL LEAVE

☐

OFF DUTY

Date and Time ending last Regular Duty 07/31/1994 03:00Date and Time beginning next Regular Duty 08/12/1994 06:00

I Chris Jones, by signing this voucher, acknowledge all Divisional
(STATE POLICE EMPLOYEE'S SIGNATURE)
Rules and Regulations.

Abe Brown

TROOP COMMANDERS ACKNOWLEDGEMENT

08/15/94

DATE

FOR ADMINISTRATIVE PURPOSES ONLY:

This voucher is submitted to payroll on Invoice # _____ By: _____

Computed Time Worked 5 X \$50.00 = \$250.00
 HOURS HOURLY RATE COMPENSATION AMOUNT

STATE OF NEW HAMPSHIRE
DEPARTMENT OF SAFETY
DIVISION OF STATE POLICE

Page No. **168.03B**Seq. #: No. 99999Detail Split with 998
Unit #**PAID DETAIL VOUCHER**

This voucher is to be completed by the State Police employee performing the below authorized Paid Detail. Upon Completion, it is to be submitted with the corresponding Weekly Duty Report and forwarded to Headquarters.

NAME Chris Jones RANK TRP ID# 999 TROOP ADATE OF DETAIL 8/2/94 TIME DETAIL BEGAN 07:00 TIME DETAIL ENDED 12:00TOTAL HOURS 5.0 TOTAL MILEAGE 14 VEH. EQ.# 9999WORK DESCRIPTION Traffic control Laconia

REQUESTING CO.: JOB # _____

NAME Plow Brothers

ADDRESS _____

ATTENTION: _____

I certify that the above named State Police
Employee worked the date and hours indicated.

John Plow

Co. Foreman or Supervisor

I certify that I worked the above date and hours
while on:

☒

DAY OFF

☐

ANNUAL LEAVE

☐

OFF DUTY

Date and Time ending last Regular Duty 07/31/1994 03:00Date and Time beginning next Regular Duty 08/12/1994 06:00

I Chris Jones, by signing this voucher, acknowledge all Divisional
(STATE POLICE EMPLOYEE'S SIGNATURE)
Rules and Regulations.

Abe Brown

TROOP COMMANDERS ACKNOWLEDGEMENT

08/15/94

DATE

FOR ADMINISTRATIVE PURPOSES ONLY:

This voucher is submitted to payroll on Invoice # _____ By: _____

Computed Time Worked 5 X \$50.00 = \$250.00
 HOURS HOURLY RATE COMPENSATION AMOUNT

STATE OF NEW HAMPSHIRE
DEPARTMENT OF SAFETY
DIVISION OF STATE POLICE

Page No. **168.03C**Seq. #: No. 99999Detail Split with 998
Unit #**PAID DETAIL VOUCHER**

This voucher is to be completed by the State Police employee performing the below authorized Paid Detail. Upon Completion, it is to be submitted with the corresponding Weekly Duty Report and forwarded to Headquarters.

NAME Chris Jones RANK TRP ID# 999 TROOP A
DATE OF DETAIL 8/4/94 TIME DETAIL BEGAN 07:00 TIME DETAIL ENDED 12:00
TOTAL HOURS 5.0 TOTAL MILEAGE 14 VEH. EQ.# 9999
WORK DESCRIPTION Traffic control Laconia

REQUESTING CO.: JOB # _____

NAME Plow Brothers

ADDRESS _____

ATTENTION: _____

I certify that the above named State Police
Employee worked the date and hours indicated.

John Plow

Co. Foreman or Supervisor

I certify that I worked the above date and hours
while on:

☒

DAY OFF

☐

ANNUAL LEAVE

☐

OFF DUTY

Date and Time ending last Regular Duty 07/31/1994 03:00Date and Time beginning next Regular Duty 08/12/1994 06:00

I Chris Jones, by signing this voucher, acknowledge all Divisional
(STATE POLICE EMPLOYEE'S SIGNATURE)
Rules and Regulations.

Abe Brown

TROOP COMMANDERS ACKNOWLEDGEMENT

08/15/94

DATE

FOR ADMINISTRATIVE PURPOSES ONLY:

This voucher is submitted to payroll on Invoice # _____ By: _____

Computed Time Worked 5 X \$50.00 = \$250.00
HOURS HOURLY RATE COMPENSATION AMOUNT

DIVISION OF STATE POLICE

Detail Split with 998
Unit #

PAID DETAIL VOUCHER

This voucher is to be completed by the State Police employee performing the below authorized Paid Detail. Upon Completion, it is to be submitted with the corresponding Weekly Duty Report and forwarded to Headquarters.

NAME Chris Jones RANK TRP ID# 999 TROOP A
 DATE OF DETAIL 8/5/94 TIME DETAIL BEGAN 07:00 TIME DETAIL ENDED 12:30
 TOTAL HOURS 5.5 TOTAL MILEAGE 14 VEH. EQ.# 9999
 WORK DESCRIPTION Traffic control Laconia

REQUESTING CO.: JOB # _____

NAME Plow Brothers

ADDRESS _____

ATTENTION: _____

I certify that the above named State Police
Employee worked the date and hours indicated.

John Plow

Co. Foreman or Supervisor

I certify that I worked the above date and hours
while on:

☒

DAY OFF

☐

ANNUAL LEAVE

☐

OFF DUTY

Date and Time ending last Regular Duty 07/31/1994 03:00Date and Time beginning next Regular Duty 08/12/1994 06:00

I Chris Jones, by signing this voucher, acknowledge all Divisional
(STATE POLICE EMPLOYEE'S SIGNATURE)

Rules and Regulations.

Abe Brown

TROOP COMMANDERS ACKNOWLEDGEMENT

08/15/94

DATE

FOR ADMINISTRATIVE PURPOSES ONLY:

This voucher is submitted to payroll on Invoice # _____ By: _____

Computed Time Worked 5.5 X \$50.00 = \$275.00
 HOURS HOURLY RATE COMPENSATION AMOUNT

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	619.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	MAINTENANCE OF TRAFFIC		
Contract Price:	\$10,000.00	Contract Quantity:	1.00 U

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	11/09/1996	Project complete.	1.00	1.00

=====

Item Total : 1.00 U

Checked By: MM Date: 11/10/1996
 Approved By: RT Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 169.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	619.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	MAINTENANCE OF TRAFFIC		
Contract Price:	\$10,000.00	Contract Quantity:	1.00 U

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
--------	---------------	------	---------	----------	-------------------------

Contract Estimate:		1.00 U	Final Estimate:	1.00 U
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Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **100.0 %**

Remarks:

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	647.1	Appropriation Code:	PAR
Item Description:	HUMUS		
Contract Price:	\$21.00	Contract Quantity:	970.00 CY
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RN 3-09	RT	08/09/1996	Slopes Sta 1560+00 to 1564+00 Rt.	200.00	200.00
RN 3-14	RT	09/09/1996	Slopes Sta 1560+00 to 1568+00 Lt.	500.00	700.00
RN 3-26	RT	09/29/1996	Slopes Sta 1564+00 to 1568+00 Rt.	300.00	1000.00

=====

Item Total : 1000.00 CY

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 192.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	647.1	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	HUMUS		
Contract Price:	\$21.00	Contract Quantity:	970.00 CY

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:			970.00 CY	Final Estimate:	1,000.00 CY

Final Estimate Within Acceptable Percentage: **[X]**

Percent Of Contract Amount Used: **103.1 %**

Remarks:

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	693.	Appropriation Code:	PAR
Item Description:	ON-THE-JOB TRAINING OF UNSKILLED WORKERS		
Contract Price:	\$	Contract Quantity:	\$600.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Report 01	RT	05/09/1995	Week Ending 04/30/1995 Jane Doe worked 30 hrs * \$0.80 / hr See RB 194.02	24.00	24.00
Report 02	RT	05/16/1995	Week Ending 05/07/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.03	32.00	56.00
Report 03	RT	05/23/1995	Week Ending 05/14/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	88.00
Report 04	RT	05/30/1995	Week Ending 05/21/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	120.00
Report 05	RT	06/06/1995	Week Ending 05/28/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	152.00
Report 06	RT	06/13/1995	Week Ending 06/04/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	184.00
Report 07	RT	06/20/1995	Week Ending 06/11/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	216.00
Report 08	RT	06/27/1995	Week Ending 06/18/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	248.00
Report 09	RT	07/04/1995	Week Ending 06/25/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	280.00
Report 09	RT	07/11/1995	Week Ending 07/02/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	312.00

Report 10	RT	07/18/1995	Week Ending 07/09/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	352.00
Report 11	RT	07/25/1995	Week Ending 07/16/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	392.00
Report 12	RT	08/01/1995	Week Ending 07/23/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	432.00
Report 13	RT	08/08/1995	Week Ending 07/30/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	472.00
Report 14	RT	08/15/1995	Week Ending 08/06/1995 Jane Doe worked 40 hrs * \$0.80 / hr See RB 194.04	32.00	512.00
Report 15	RT	08/22/1995	Week Ending 08/13/1995 Jane Doe worked 50 hrs * \$0.80 / hr See RB 194.04	40.00	552.00
Report 16	RT	08/29/1995	Week Ending 08/20/1995 Jane Doe worked 60 hrs * \$0.80 / hr See RB 194.04	48.00	600.00

=====

Item Total : **\$600.00**

Checked By: MM
Approved By: RT

Date: 11/10/1996
Date: 11/10/1996

Contract Administrators are advised to review the contract for the specific requirements of OJT on their projects. These requirements can vary greatly and may require close supervision by the Contract Administrator to ensure the trainee is properly trained. The Contract Administrator should contact Labor Compliance and request a current copy of the "OJT Training Manual" for additional information.

Print Date: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	693.	Appropriation Code:	PAR
Item Description:	ON-THE-JOB TRAINING OF UNSKILLED WORKERS		
Contract Price:	\$	Contract Quantity:	\$600.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
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Contract Estimate:	\$600.00	Final Estimate:	\$600.00
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Final Estimate Within Acceptable Percentage: ☐ ☐

Percent Of Contract Amount Used: 100.00 %

Remarks:

ON-THE-JOB TRAINING ACKNOWLEDGEMENT AND STATEMENT OF INTENT

Date

To: External EEO Coordinator
Office of Labor Compliance
New Hampshire Department of Transportation
P.O. Box 483, 1 Hazen Drive
Concord, NH 03302-0483

Project Name and Number: _____

_____(Company) has reviewed the OJT training requirements (Training Special Provisions) stated in the contract for the above noted project. Based on these requirements, the availability of applicants within a reasonable area of recruitment, and in an effort to meet the minority and female participation goals outlined in the contract (Affirmative Action Requirements, 41 CFR 60-4.2- Solicitations), our company will select a qualified trainee(s) and conduct training under the classification(s) identified below in accordance with the

(Name of OJT Program)

***Submit copy of training program (training classification) to be used if other than NHDOT OJT Program**

The undersigned has personally reviewed the content of each selected training classification in relation to the project scope and assures that all portions of training can be completed if initiated by the “no later than” (NLT) date indicated below.

1 Selected Training Classification	2 Number of Trainees in Classification	3 Projected Start Date	4 NLT Start Date in Order to Complete Training
1.			
2.			
3.			
4.			
5.			

Division 800

IMPORTANT: Written justification is required to substantiate the selection of training classifications where company representation is below the minority and female participation goals specified in the contract. Compare columns (i) and (j) of the table on page 2 of 2 with 41 CFR 60-4.2, Affirmative Action Requirements.

RB Page No. 194.03

Please provide information regarding your company's current workforce demographics in the trades listed below:

(a) Trade Classification	(b) Total Employees	(c) Female	(d) Hispanic	(e) American Indian or Alaskan Native	(f) Black	(g) Asian or Pacific Islander	(h) Total of columns (d) through (g)	(i) Minority Percentage (h) / (b)	(j) Female Percentage (c) / (b)
Constr. Supervisors									
Constr. Foreperson									
Carpenters									
Equipment Mechanics									
Equipment Operators									
Grade Foreman Asst.									
Ironworker									
Laborers									
Truck Drivers									

The authorized representative below certifies that the information proved herein is accurate and is made in good faith:

Company EEO Officer

Signature

Date: _____

Approval ☐ Disapproval ☐

Date: _____

NHDOT External EEO Coordinator

CONTRACTOR: Submit in original to NHDOT External EEO Coordinator for review/approval. Distribution: 1 (original) – External EEO Coordinator; 1 – Contractor; 1 – DOT Contract Administrator (for project records); 1 – Trainee.



NH DEPARTMENT OF TRANSPORTATION

OJT PROGRAM ENROLLMENT/REGISTRATION FORM

Date: _____

Project Location: _____ Project Number: _____

Trainee Name/Address: _____

Phone No.: _____

Ethnic Group Designation: _____

Gender: _____ Male _____ Female

_____ Disabled Person

_____ Ex-Offender

_____ Ex-Welfare Recipient

_____ New Hire

_____ Rehire

_____ Upgrade

If Upgrade or Re-Hire, Explain: _____

Training Classification: _____ Hours of Training Required: _____

Name of Trainer: _____ Site Phone No: _____

START DATE: _____

Full Journeyman Rate: \$ _____

TRAINING INCREMENTS:1st Half: \$ _____ /hr.
(60% of journeyman rate minimum)3rd Qtr: \$ _____ /hr
(75% of journeyman rate minimum)4th Qtr: \$ _____ /hr
(90% of journeyman rate minimum)

Trainee Acknowledgement/Signature: _____

CONTRACTOR'S CERTIFICATION: A copy of the selected training classification and program manual to which it applies have been issued to the trainee. I further certify that the trainee has not been employed as a journeyman worker in the classification for which he/she will receive training:

EEO Officer Signature: _____

FOR NH DEPARTMENT OF TRANSPORTATION USE ONLY
APPROVAL OF TRAINING PROGRAM

Training Classification

Total Program Hours

NHDOT Contract Administrator

Date

NHDOT External EEO Coordinator

Date

Distribution: Original to NHDOT External EEO Coordinator for review/approval. Labor Compliance Office will coordinate training with DOT Contract Administrator and get OJT Form 2 - Enrollment/Registration February, 6 2003

signature. Three approved/signed copies will then be forwarded to the DOT Contract Administrator for distribution: 1 - Project Records; 1 - Contractor; 1 - Trainee



ON-THE-JOB TRAINING PROGRAM

TRANSFER/MODIFICATION REQUEST

Project Number: _____

Date: _____

In order to fulfill the training requirement for this project, _____
(contractor name)
 requests permission to transfer or add (circle one) _____ training hours in:

1. _____ (specify item or training phase)
2. _____ (specify item or training phase)
3. _____ (specify item or training phase)
4. _____ (specify item or training phase)

from the above noted project to _____
(name and location of new project)

The reason for this request is: (check all that apply)

- ☐ The new project will provide better training opportunity
☐ The current project is near completion and the required training cannot be completed
☐ Other (explain): _____

Name of trainee(s) concerned: _____

Printed name and signature of NHDOT Contract Administrator (**current project**):

_____ Date: _____

_____ Date: _____

Company EEO Officer name and signature

☐ Approved ☐ Disapproved

_____ Date: _____
 NHDOT External EEO Coordinator

Division 800

Contractor: First coordinate your request with the NHDOT Contract Administrator, obtain signature, then forward to NHDOT Labor Compliance Office for approval.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 195.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	699.	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	TEMPORARY PROJECT WATER POLLUTION CONTROL		
Contract Price:	\$	Contract Quantity:	\$10,000.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 195.02	RT	07/08/1995	Report # 1 Building a dewatering basin	8000.00	8000.00
RB 195.03	RT	08/08/1995	Report # 2 Installation of turbidity curtain in river.	2000.00	10000.00
RB 195.04	RT	09/08/1995	Report # 3 Covering slope with plastic due to forecasted heavy rains.	300.00	10300.00

=====
Item Total : \$10,300.00

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 195.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	699.	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	TEMPORARY PROJECT WATER POLLUTION CONTROL		
Contract Price:	\$	Contract Quantity:	\$10,000.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
<hr/>					
Contract Estimate:				\$10,000.00	Final Estimate: \$10,300.00

Final Estimate Within Acceptable Percentage: ☒ [X]

Percent Of Contract Amount Used: **103.0 %**

Remarks:

Rev.3/95

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
DAILY REPORT OF EXTRA WORK - - FORCE ACCOUNT

Laconia	NHS-018-2(104)	99999
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Project Name	Federal No.	State No.
--------------	-------------	-----------

Work Order No. _____ Dated: 07/08/1995 Report No. 1 ☒ Per Specs ☐ Per Plans

Description	Item 699: Construct dewatering basin to treat the turbid water prior to discharge into the river.
-------------	---

Date Work Performed: July 2-3, 1995 **Location:** Sta ±1545 Lt

LABOR **Company Name if Subcontractor:** Structures Unlimited

Employee Name	Classification	Regular Hours	Overtime Hours	Total Hours	Per Hour	Payroll		Payroll Burden (*)				
								Rate	Total		LINE TOTAL	
J. Able	Exc. Operator	15		15	\$25.00	\$375	.00	45%	\$168	.75	\$543	.75
J. Caputo	Truck Driver	15		15	\$15.00	\$225	.00	45%	\$101	.25	\$326	.25
A. Cap	Laborer	15		15	\$10.00	\$150	.00	45%	\$67	.50	\$217	.50
A. Smith	Laborer	15		15	\$8.00	\$120	.00	45%	\$54	.00	\$174	.00
A. Jones	Laborer	15		15	\$8.00	\$120	.00	45%	\$54	.00	\$174	.00
(*) FICA, FUT, SUT, WC & Liability, H&W, 401K, Health, Life And Union Charges									SUB TOTAL		\$1435	.50
To Be Furnished By The Contractor Subject To Audit									+ 10 %		\$143	.55

LABOR TOTAL	\$1579	.05
-------------	--------	-----

MATERIAL

Type, Item, from "Contractor's stock", Bill Of _____, etc.	Unit	Quantity	Unit Rate		LINE TOTAL			
Geotextile Fabric, invoice #102030	SY	555	\$2	.00	\$1110	.00		
Class C Stone, invoice #51015	Ton	120	\$15	.00	\$1800	.00		
Enviro-Friendly "Dirt Bag"	EA	1	\$399	.04	\$399	.04		
<div>Invoices supporting this document should be placed in the Record Book after this report.</div>								
Vouchers supporting these charges must show actual cost less any trade discount.			SUB TOTAL		\$3309	.04		
Billed labor (by others) not entered on contractor payrolls is to be listed under Materials.			+ 15 %		\$496	.36		
MATERIAL TOTAL							\$3805	.40

EQUIPMENT

Type, With/Without operator, Owner Operated, Specified/Agreed Rate, etc.	Unit	Quantity	Unit Rate		LINE TOTAL		
2002 CAT 345 Excavator, 2.5cy, 45.2MT, 321HP, BB 10-8	Hr	15	\$132	.42	\$1986	.30	
(\$14,945/176x1.0x0.95) + \$51.75/HR = \$132.42/HR							
2001 Dump Truck, 6x4, 70,000LB, 12-18CY, 325HP, BB-20-1	Hr	15	\$41	.95	\$629	.25	
(3520/176x1.0x0.95) + \$22.95/HR = \$41.95/HR							
See Standard Specification 109.04.D.3 for determination of Equipment Rates.							
Include Manufacturers Name, Model No., Size, Horsepower, Gas or Diesel, Attachments, etc.			EQUIPMENT TOTAL		\$2615	.55	

EQUIPMENT TOTAL	\$2615	.55
------------------------	--------	-----

LABOR / MATERIAL / EQUIPMENT TOTAL	\$8000	.00	
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When above Force Account work performed by a subcontractor, + 5 %			
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SUB TOTAL	\$8000	.00	
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Bond Premium @ <u>0.00</u> %			
------------------------------	--	--	--

GRAND TOTAL	\$8000	.00
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The Federal Acquisition Regulation (FAR) and the United States Code (Crimes and Criminal Procedures) is applicable to this statement. (Section 1001 of Title 18, among other things, provides that whoever knowingly and willfully falsifies, makes any false statement, or omits material or information, in any manner within the jurisdiction of any department or agency of the United States shall be fined not more than \$10,000 or imprisoned not more than five years or both.)

I hereby certify that the account work described, that the labor and equipment were used for the hours indicated, that the rates for labor do not exceed those for comparable labor currently employed on the project, and that the material was obtained from the source of supply from stock, the quantity claimed was actually used and the price and transportation represent the actual cost to the Contractor or Subcontractor.

Certified By John Plow, Superintendent.
Signature and Title

Submitted By Ronald Tanner, P.E.
Contract Administrator

Plow Brothers, Inc.

Authorized By _____

Prime Contractor Company Name

District Construction Engineer

Construction Bureau _____ Contractor _____ District Construction Engineer _____ Record Book _____

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 197.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	1010.12	Appropriation Code:	PAR
Item Description:	PRICE ADJUSTMENT, GASOLINE		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	08/09/1996	Work Done From: 07/15/1996 To: 07/31/1996 Quantity Used: 1,274.06 Base Price :\$0.333 Period Price :\$0.3789 Price Diff :\$0.0459 (13.7838%) Adj% Factor :10.0 Pay/NoPay : Pay : \$58.48	58.48	\$58.48
DE	RT	08/20/1996	Work Done From: 08/01/1996 To: 08/15/1996 Quantity Used: 709.82 Base Price :\$0.333 Period Price :\$0.3927 Price Diff :\$0.0597 (17.9279%) Adj% Factor :10.0 Pay/NoPay : Pay : \$42.38	42.38	\$100.86

=====

Item Total : \$100.86

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

For projects with CMS this entry will be done automatically. Paper projects should follow the example calculations outlined in the contract Special Attention. The fixed Base Prices are specified in the Special Attentions of the project contract. The period price will be supplied monthly by Fuel Distribution.

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 197.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	1010.12	Appropriation Code:	PAR
Item Description:	PRICE ADJUSTMENT, GASOLINE		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
--------	---------------	------	---------	----------	-------------------------

Contract Estimate:	\$0.00	Final Estimate:	\$100.86
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Final Estimate Within Acceptable Percentage: [NA]

Percent Of Contract Amount Used: N/A %

Remarks:

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 198.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	1010.2	Appropriation Code:	PAR
Item Description:	PRICE ADJUSTMENT, ASPHALT CEMENT		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
DE	RT	08/09/1996	Work Done From: 07/15/1996 To: 07/31/1996 Quantity Used: 0.0 Asph. Factor : 0.0 Asph. Cement :0 Adj% Factor : 0.0 Base Price :\$221.000 Period Price :\$239.000 Price Diff :\$18 (8.14%) Pay/NoPay : Pay : \$0.00	0.00	\$0.00
DE	RT	08/20/1996	Work Done From: 08/01/1996 To: 08/15/1996 Quantity Used: 32.71 Asph. Factor : 0.062 Asph. Cement :2.02802 Adj% Factor : 0.0 Base Price :\$221.000 Period Price :\$251.000 Price Diff :\$30 (13.57%) Pay/NoPay : Pay : \$16.02	16.02	\$16.02

=====

Item Total : \$16.02

Checked By: _____
Approved By: _____

For projects with CMS this entry will be done automatically. CMS will ask for the asphalt factor to be entered when adding tonnages in for each estimate under the relevant pavement item 403.XX Paper projects should follow the example calculations outlined in the contract's Special Attention for this item. The fixed base price is specified in the Special Attentions. The period price will be supplied monthly by Materials and Research. The asphalt factor can be found on the approved mix design under "Total %AC" or calculated off the paving slips. This **factor varies by plant and mix design.**

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 198.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	1010.2	Appropriation Code:	PAR
Item Description:	PRICE ADJUSTMENT, ASPHALT CEMENT		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
--------	---------------	------	---------	----------	-------------------------

Contract Estimate:	\$0.00	Final Estimate:	\$16.02
---------------------------	---------------	------------------------	----------------

Final Estimate Within Acceptable Percentage: [NA]

Percent Of Contract Amount Used: N/A %

Remarks:

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

RB Page 800.00

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	.01	Appropriation Code: PAR	Certificate Of Compliance: Not Required
Item Description:	EXTRA WORK: REMOVE AND REPLACE STONE MASONRY		
Contract Price:	\$	Contract Quantity:	\$0.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 800.03	RT	07/08/1995	Report # 1 Remove and reset stone masonry.	927.12	927.12

=====

Item Total : \$927.12

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

Print Date: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

RB Page 800.01

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	.01	Appropriation Code:	PAR
Item Description:	EXTRA WORK: REMOVE AND REPLACE STONE MASONRY		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
Contract Estimate:			\$0.00	Final Estimate:	\$927.12

Final Estimate Within Acceptable Percentage: [NA]**Percent Of Contract Amount Used: N/A %**Remarks:

See change order #1 on RB Page 800.02 and the daily report of extra work on RB Page 800.03.

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF CONSTRUCTION**

To: **Plow Brothers Inc.** You are hereby notified to perform the following work in accordance with the provisions of your contract with the Department dated April 19, 1994.

☐ Alteration Order # ☒ Extra Work Order # ☐ Supplementary Agreement

Laconia	NHS-018-2 (104)	99999
Project Name	Federal No.	State No.

Payment will be made by: ☐ Bid Prices ☐ Agreed Prices ☒ Force Account

REASON: See correspondence file #109, date 6/20/95.

Item No.	Description	Appn Code	Unit	Estimated Quantity	Unit Price		Estimated Cost
					Agreed	Per Bid	
0.01	Remove and Replace Stone Masonry	PAR	\$				\$1,500.00
	Labor:			\$600.00			
	Equipment:			\$850.00			
	Materials (grout)			\$50.00			
TOTAL							\$1,500.00

Requested: Yes S.A. Accepted by:

Contract Extension Granted: N/A Approved by: _____
Working Days Authorized: 1 Contractor's Representative

CHANGE ORDER # 1
Ronald Tanner

 NHDOT Contract Administrator

Original in Record Book_____ Copy to Contractor_____ Copy to FHWA for Information_____

Rev.3/95

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION**

DAILY REPORT OF EXTRA WORK - - FORCE ACCOUNT

Laconia

NHS-018-2(104)

99999

Project Name

Federal No.

State No.

Work Order No. 0.01

Dated: 07/07/1995

Report No. 1

☒ Per Specs☐ Per Plans

Description Remove and reset stone masonry per change order #1.

Date Work Performed: July 6, 1995

Location: Bridge # 138 / 128.

LABOR Company Name if Subcontractor: Structures Unlimited

Employee Name	Classification	Regular Hours	Overtime Hours	Total Hours	Per Hour	Payroll	Payroll Burden (*)			LINE TOTAL
							Rate	Total		
J. Able	Air Tool Op.	8		8	\$11.50	\$92 .00	45%	\$41 .40		\$133 .40
J. Caputo	Mason	8		8	\$15.00	\$120 .00	45%	\$54 .00		\$174 .00
G. Caputo	Mason	8		8	\$15.00	\$120 .00	45%	\$54 .00		\$174 .00
A. Smith	Laborer	8		8	\$8.00	\$64 .00	45%	\$28 .80		\$92 .80
A. Jones	Laborer	8		8	\$8.00	\$64 .00	45%	\$28 .80		\$92 .80
							SUB TOTAL			\$667 .00
							+ 10 %			\$66 .70

(*) FICA, FUT, SUT, WC & Liability, H&W, 401K, Health, Life And Union Charges

To Be Furnished By The Contractor Subject To Audit

LABOR TOTAL \$733 .70**MATERIAL**

Type, Item, from "Contractor's stock", Bill Of ___, etc.	Unit	Quantity	Unit Rate	LINE TOTAL
Sand (bill of Mullins S&G)	Ton	1	\$5 .00	\$5 .00
Cement (from contractor's stock)	Bags	5	\$3 .00	\$15 .00
Invoices supporting this document should be placed in the Record Book after this report.				
Vouchers supporting these charges must show actual cost less any trade discount.				
Billed labor (by others) not entered on contractor payrolls is to be listed under Materials.				
SUB TOTAL				\$20 .00
+ 15 %				\$3 .00
MATERIAL TOTAL				\$23 .00

EQUIPMENT

Type, With/Without operator, Owner Operated, Specified/Agreed Rate, etc.	Unit	Quantity	Unit Rate	LINE TOTAL
Compressor (Schramm, 1993), 125 cf/min, gas, rotary	Hr	8	\$4 .80	\$38 .40
Air hammer (Chipper, 1989)	Hr	8	\$0 .95	\$7 .60
See Standard Specification 109.04.D.3 for determination of Equipment Rates.				
Include Manufacturers Name, Model No., Size, Horsepower, Gas, etc.				
EQUIPMENT TOTAL				\$46 .00

LABOR / MATERIAL / EQUIPMENT TOTAL

\$802 .70

When above Force Account work performed by a subcontractor, + 5 %

\$40 .14

SUB TOTAL

\$842 .84

Bond Premium @ 10.00 %

\$84 .28

GRAND TOTAL

\$927 .12

The **Bond Premium** must be applied to any force account work (spec. 109.04) that was not accounted for in the bid quantities (i.e., any new extra work item, or any items like 699 that have exceeded the bid quantity).

Section 18 of the United States Code (Crimes and Criminal Procedures) is applicable to this statement. (Section 1001 of the United States Code, which makes it a crime to make any false statement or writing containing any false, fictitious or fraudulent statement or entry, in any manner within the jurisdiction of the United States, is also applicable.)

I hereby certify that the labor and equipment shown on the force account work described, that the labor and equipment were used for the hours indicated, that the rates for labor and equipment shown as from "Contractor's stock" was actually from stock, the quantity claimed was actually used and the price and

Certified By

John Plow, Superintendent.

Signature and Title

Plow Brothers, Inc.

Prime Contractor Company Name

Construction Bureau

Submitted By

Ronald Tanner, P.E.

Contract Administrator

Authorized By

District Construction Engineer

Record Book

Contractor

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	.80	Appropriation Code:	PAR
Item Description:	MISCELLANEOUS OFFICE SUPPLIES		
Contract Price:	\$	Contract Quantity:	\$0.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
RB 801.02	RT	07/08/1995	Report # 1 Disposable cameras for project personnel.	60.21	60.21
RB 801.03	RT	07/08/1995	Report # 2 Field books from Waste.	44.03	104.24

=====

Item Total : \$104.24

Checked By: MM
 Approved By: RT

Date: 11/10/1996
 Date: 11/10/1996

This is an example of a "per spec." extra work item. A "per spec." item is work that does not have a specific item number assigned to it but is specifically addressed in the Standard Specifications for Road and Bridge Construction under Method of Measurement. Examples of "per spec." items are tree trimming; furnishing and installing extra permanent construction signs; calcium chloride; and payment for field office supplies. When used the item numbers assigned to them should be 0.80, 0.81, etc. Change orders are not required for these items.

Print Date: 11/10/1996

**State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY**

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	.80	Appropriation Code:	PAR
Item Description:	MISCELLANEOUS OFFICE SUPPLIES		
Contract Price:	\$	Contract Quantity:	\$0.00
		Certificate Of Compliance:	Not Required

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
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Contract Estimate:	\$0.00	Final Estimate:	\$104.24
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Final Estimate Within Acceptable Percentage: [NA]

Percent Of Contract Amount Used: N/A %

Remarks:

Rev.3/95

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
DAILY REPORT OF EXTRA WORK - - FORCE ACCOUNT

Laconia	NHS-018-2(104)	99999
Project Name	Federal No.	State No.
Work Order No. 0.80	Dated: 7/7/1995	Report No. 1
Description Item 0.80 Miscellaneous Office Supplies.		<input checked="" type="checkbox"/> Per Specs <input type="checkbox"/> Per Plans
Disposable cameras for project personnel		
Date Work Performed: 7/6/1995	Location: For use over entire project area.	

LABOR Company Name if Subcontractor:

Employee Name	Classification	Regular Hours	Overtime Hours	Total Hours	Per Hour	Payroll	Payroll Burden (*)		LINE TOTAL
							Rate	Total	
(*) FICA, FUT, SUT, WC & Liability, H&W, 401K, Health, Life And Union Charges To Be Furnished By The Contractor Subject To Audit								SUB TOTAL	
								+ 10 %	
LABOR TOTAL									

MATERIAL

Type, Item, from "Contractor's stock", Bill Of ___, etc.	Unit	Quantity	Unit Rate	LINE TOTAL
Cameras-R-Us, invoice # 12345	\$	5	\$9 .52	\$47 .60
Vouchers supporting these charges must show actual cost less any discounts.			SUB TOTAL	\$47 .60
Billed labor (by others) not entered on contractor payrolls is to be listed under Materials.			+ 15 %	\$7 .14
MATERIAL TOTAL				\$54 .74

A copy of the referenced invoice "#12345"
should be included in the Record Book
immediately after this page and numbered
RB Page 801.02A.

EQUIPMENT

Type, With/Without operator, Owner Operated, Specified/Agreed Rate, etc.	Unit	Quantity	Unit Rate	LINE TOTAL
Include Manufacturers Name, Model No., Size, Horsepower, Gas or Diesel, Attachments, etc.	EQUIPMENT TOTAL			
LABOR / MATERIAL / EQUIPMENT TOTAL				\$54 .74
When above Force Account work performed by a subcontractor, + 5 %				0
SUB TOTAL				\$54 .74
Bond Premium @ 10.00 %				\$5 .47
GRAND TOTAL				60 .21

The following regulation is applicable to all projects involving Federal Funds: Section 1001 of Title 18 of the United States Code (Crimes and Criminal Procedures) is applicable to this statement. (Section 1001 of Title 18, among other things, provides that whoever knowingly and willfully makes or uses a document or writing containing any false, fictitious or fraudulent statement or entry, in any manner within the jurisdiction of any department or agency of the United States shall be fined not more than \$10,000 or imprisoned not more than five years or both).

I hereby certify that the labor, materials and equipment listed above were actually used on the force account work described, that the labor and equipment were used for the hours indicated, that the rates for labor do not exceed those for comparable labor currently employed on the project, and that the material shown as from "Contractor's stock" was actually from stock, the quantity claimed was actually used and the price and transportation represent the actual cost to the Contractor or Subcontractor.

Certified By John Plow, Superintendent
Signature and Title
PLOW BROTHERS, INC.
Prime Contractor Company Name

Submitted By Ronald Tanner
Contract Administrator
Authorized By _____
District Construction Engineer

extrawrk.doc or Ew.doc

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	612.2248	Appropriation Code: PAR	Certificate Of Compliance: Required
Item Description:	48 INCH RCP, CLASS III WITH NEOPRENE GASKET		
Contract Price:	66.50	Contract Quantity:	0.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
N 1-11	RT	09/11/96	See Change Order #3 on RB Page 900.02.	118.00	118.00

=====
Item Total : 118.00 LF

Checked By: MM
Approved By: RT

Date: 11/10/1996
Date: 11/10/1996

Print Date: 11/10/1996

State Of New Hampshire Department Of Transportation
RECORD BOOK ITEM SUMMARY

Project Name	LACONIA, NHS-018-2 (104), 99999		
Item Number:	612.2248	Appropriation Code: PAR	Certificate Of Compliance: Required
Item Description:	48 INCH RCP, CLASS III WITH NEOPRENE GASKET		
Contract Price:	0.00	Contract Quantity:	0.00

Source	Entered By	Date	Remarks	Quantity	Accumulated Quantity
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Cotract Estimate:	0.00 LF	Final Estimate:	118.00 LF
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Final Estimate Within Acceptable Percentage: [NA]

Percent Of Contract Amount Used: N/A %

Remarks:

See Change Order #3 on RB Page # 900.02.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF CONSTRUCTION

May 3, 1996

To: Plow Brothers Inc. You are hereby notified to perform the following work in accordance with the provisions of your contract with the Department dated April 19, 1994.

☒ Alteration Order # 2 ☐ Extra Work Order # ☒ Supplementary Agreement

Laconia
Project Name

NHS-018-2 (104)
Federal No.

99999
State No.

Payment will be made by: ☒ Bid Prices ☐ Agreed Prices ☐ Force Account

DESCRIPTION: (1) Between Sta. 21+40 & 24+60, wreck existing 24 x 36 inch oval brick sewer. (2) Omit 18 x 24 inch RCP storm sewer on the easterly side of Main St., between the above stations. (3) From Sta. 21+40 - 22+60 install 48 inch RCP Class III storm sewer. From Sta. 22+60 - 24+60 install 36 inch RCP Class III storm sewer.

REASON: Existing oval brick sewer found to be in poor condition and to lie at such an elevation as to raise doubts that the new work can be carried out without severe structural damage thereto.

Item No.	Description	Appn Code	Unit	Estimated Quantity	Unit Price		Estimated Cost
					Agreed	Per Bid	
206.1	Common Structure Excavation	033	cy	1874		\$2.00	\$3748.00
612.2290	36 inch RCP	033	ft	188		\$43.50	\$8178.00
S.A. 612.2248	48" RCP w/ Neoprene Gasket	033	ft	118	\$66.50		\$7847.00
604.12	C.B. Type B	033	U	5		\$250.00	\$1250.00
604.3	Manholes	033	U	6		\$300.00	\$1800.00
TOTAL							\$22,823.00

Federal Participation

Requested: Yes S.A. Accepted by: Plow Brothers Inc.

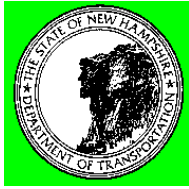
Contract Extension Granted: Yes Approved by: John Plow, Superintendent

Working Days Authorized: 2
 CHANGE ORDER # 3 Contractor's Representative
Ronald Tanner
 District Construction Engineer

Original in Record Book ____ Copy to Contractor ____ Copy to FHWA for Information ____

SECTION 808 – ENGINEERING AUDIT PROCESS MANUAL

This last section of Division 800 is a reprint of the *Engineering Audit Process Manual*. The *Engineering Audit Process Manual* was written by the Engineering Audit Section and was last revised in March 2005. It has been included in this manual to provide extra guidance and clear expectations for the production and completion of project records.



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

BUREAU OF CONSTRUCTION

Engineering Audit Section

Engineering Audit Process

FOREWORD

This manual establishes a uniform reference for the engineering audit process implemented by the Engineering Audit Section on completed construction project records. Fundamentally, the engineering audit process is a thorough review of the project records to verify the final pay quantities and to account for paperwork required to close out a project. The engineering audit is not intended to be a substitute for good record keeping practices in the field. In fact, good record keeping facilitates the audit both in its accuracy and timeliness. While all projects administered by the Bureau of Construction are subject to an engineering audit, not all projects will necessarily be audited. Nonetheless, the goal is to audit as many projects as possible given the limitations of available time and resources.

The various tasks involved in completing an engineering audit are collectively referred to as the Engineering Audit Process. The phases and individual steps in the audit and the responsibilities of those involved in the audit are described in this manual. In addition, the supporting documents used in the audit are included in the Appendices in the back of the manual for reference.

The Engineering Audit Process begins at the advertisement of a construction contract, and it continues until the project records are archived, a period of time that can extend from several months to several years. The audit process from advertising of a project through its construction phase consists mainly of project tracking and providing assistance to specific requests from construction personnel. Requests from field personnel cover many areas, but generally involve interpreting specifications, setting up records and providing new cross-sections for quantity determinations. Also, Construction Management System database support is provided through the Engineering Audit Section. The construction phase of the audit process is a period in which the Section has the opportunity to provide meaningful customer support.

The majority of work involved with auditing occurs after the project records are turned into the Engineering Audit Section. The objective is to complete the actual audit of the project records within a 90-day period. The audit is usually performed in the Engineering Audit office, but sometimes it is conducted in an outside office by temporarily assigned help. Like construction projects, audit work tends to peak seasonally. The greatest amount of audit work occurs in the late fall and winter when records from the previous construction season are completed and turned in.

The Engineering Audit Process is not intended to be inflexible or static. The steps or forms used in the audit process are all subject to revision and modification to meet the aim of a timely and accurate audit. In this light, those performing the audits are encouraged to always look for ways to improve the process and make suggestions accordingly.

Chief of Engineering Audit
Engineering Audit Section
Bureau of Construction

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Overview of the Engineering Audit Process

The Engineering Audit Process is established to satisfy the general requirements of 23 CFR 635.123, which is the federal law covering the “Determination and Documentation of Pay Quantities” on federally funded projects. In summary, the NHDOT is required to have procedures in place that ensure quantities of completed work are determined accurately and on a uniform basis, and that all source documents used to determine payments are made a part of the permanent record. This standard is also applied to non-federal aid highway projects as a matter of routine procedures in the NHDOT. The Engineering Audit Process is thus established to ensure that fair and proper payments are made in all federally funded and non-federally funded highway contracts. Properly executed audits preserve the records for future reference and protect the State from unsubstantiated claims.

The Engineering Audit Process is broken down into 8 distinct phases, which are shown below in the general sequence in which they occur. Actions to be performed in each of these phases are described in this manual. Variations from the prescribed process are sometimes necessary to address special situations or circumstances of a project. The desired goal is to have a project complete the auditing related portion of the Audit Process, phases 2 through 7, within a 90-day period as measured from when the project records are accepted for auditing to when the final estimate is sent to the Bureau of Construction. Some projects may take substantially longer to complete the entire Audit Process because of factors such as unfinished work, claims and incomplete records, which are generally beyond the control of the Engineering Audit Section.

Phases of the Engineering Audit Process

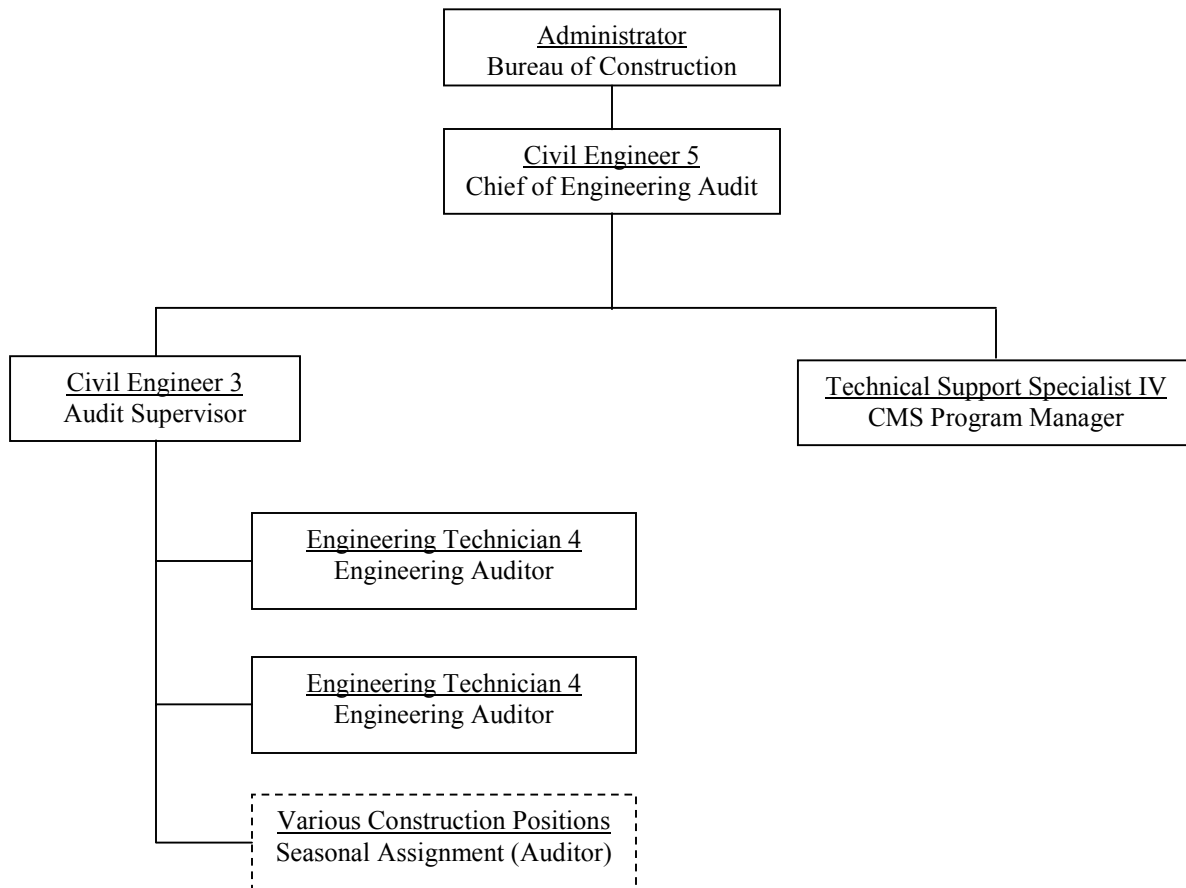
1. Project Initiation
2. Project Records Receipt
3. Pre-Audit Records Review
4. Project Records Audit
5. As-Built Plans Completion
6. Supervisory Review
7. Final Estimate Process
8. Project Records Wrap-Up

The Chief of Engineering Audit, as needs require, may temporarily or permanently modify the Engineering Audit Process. Modifications to the Engineering Audit Process may be required to contend with limited resources available for auditing or to address timeliness of the audits. Some projects may be subject only to spot checks, abbreviated audits or cursory reviews, depending upon the type and dollar value of the project. Any modifications to the Engineering Audit Process will be consistent with meeting the goals of making fair and proper payments to Contractors, preserving project records and timeliness of the process.

Engineering Audit Section Organization

The Engineering Audit Section (Audit), which is located in Room 270 of the John O. Morton Building, is part of the Bureau of Construction, reporting directly to the Construction Bureau's Administrator. Audit consists of a full-time office staff that is augmented by temporary or permanent assignment of various positions from within the Bureau of Construction. Temporary staff is usually assigned during periods of slow construction activity, which tend to be periods of increased auditing activity. The Engineering Audit Section consists of a mix of Civil Engineer and Engineering Technician positions, as shown on the organization chart below. Also included in Audit is a Technical Support Specialist, who is responsible for managing and maintaining the Construction Management System database.

Organization Chart



Position Roles and Responsibilities

Chief of Engineering Audit: The Chief of Engineering Audit (Chief) directs and supervises all Engineering Audit procedures and work practices, and has overall responsibility for determining final contract quantities and payments made to Contractors. The Chief makes audit assignments and determines the degree of auditing to be performed on a project. The Chief maintains the Project Tracking Database and prepares various reports to track progress of the work. Final Estimates are reviewed and approved by the Chief prior to submission to the Bureau of Construction. The Chief provides final guidance on questions that cannot be resolved at the Auditor or Supervisor level, negotiating or mediating if necessary with Department and Contractor personnel.

Engineering Audit Supervisor: The Engineering Audit Supervisor (Supervisor) reviews the project audit completed by an Engineering Auditor, verifying all changes made to the quantities and spot-checking the accuracy of the audit. The Supervisor also ensures that paperwork requirements have been met and approvals have been obtained for a project to complete the audit. The Supervisor seeks answers to questions and resolves disputes that arise from the audit with Contractors and Contract Administrators. The Final Estimate is prepared by the Supervisor and forwarded to the Chief of Engineering Audit for approval. The Supervisor also completes project audits.

Engineering Auditor: The Engineering Auditor (Auditor) completes the audit of project records to obtain accurate final quantities. The Auditor performs a detailed analysis of the quantity for each individual pay item in the contract, making revisions and notes as needed to complete the audit. The Auditor ensures that measurements and calculations of quantities follow applicable specifications. The Auditor presents questions that arise during the audit to the Engineering Audit Supervisor or project Contract Administrator. Projects that have completed the audit process are prepared for archiving by the Auditor.

CMS Program Manager: The Construction Management System (CMS) Program Manager is responsible for all aspects of the CMS program both in the field and in the Morton Building. Routine duties include database management, code development and maintenance, and the collection and processing of estimates. The CMS Program Manager also trains users of CMS and ensures construction jobsite computers are configured properly for CMS. The CMS Program Manager develops new methodologies and software programs, and also acts as a liaison in collaborative efforts with higher-level Information Technology Agencies. The Program Manager does not perform audits, but assists them through CMS data retrieval.

Non-Audit Duties: Besides engineering audit duties, the full-time staff has other responsibilities that vary by position. Tasks such as computer aided design work, equipment inventory management, and information input for the Internet-based CARS program are completed by the full-time staff. Audit maintains the Bureau's storage area, Room 182, for newly printed plans and contracts for upcoming construction projects. Another major responsibility of Audit is the processing for payment of invoices from Consultants for material testing performed on active construction projects.

Engineering Audit Project Tracking Database

The Chief of Engineering Audit utilizes a database to monitor the status of all projects in the Engineering Audit Process. Projects are entered into the database when they are first advertised and they are tracked until they are archived. Key information about a project is placed in the database, as well as audit information such as dates for the completion of sub-tasks or the receipt of certain documents. Various reports are generated from the database to track the progress of the projects through the Engineering Audit Process. The following is recorded in the database for each project:

- Project Name
- State Number
- Federal Number
- General project type
- Planned completion date
- Assigned District Construction Engineer and Contract Administrator
- Contractor and winning bid amount
- Status as a CARS project
- Status as an I-95 Corridor project
- FHWA Form 47 requirements and date of completion
- Dates when the records are stored in Audit and when the records are accepted for auditing
- Shelf location of the records in the bin storage unit
- Slot location of the original mylars in the tub storage container
- Date the initial Worksheet #1 is requested from Mainframe Operations
- Status of As-Built Plans and their date of completion
- Date all Material Certificates are verified as received
- Status of payrolls on federal projects and the date of approval
- Assigned Engineering Auditor
- Target date for completion of the audit
- Dates when the audit actually begins and ends
- Percent complete of the audit
- Status of a Worksheet #1 correction
- Date a Final Estimate is requested from Finance & Contracts
- Amount on the Final Estimate after the audit
- Amount of retainage on to be released with the Final Estimate
- Final total amount of the project
- Date the Final Estimate is signed by the Chief
- Date the Final Estimate is sent to the Bureau of Construction
- Actual project completed and accepted date
- Date of the Completion Certificate
- Date of the Final Estimate Payment letter issued by the Bureau of Construction
- Date the records are sent to archives and the assigned box number
- Any notes relevant to the audit or record status
- Records quality score



Project Initiation

The Engineering Audit Process is initiated when Engineering Audit receives an Invitation for Bids sheet for a project. Phase 1 of the Engineering Audit Process covers the time period from when a project is advertised for bidding to when the project records are turned into Engineering Audit. This period includes the active construction phase of a project, which can last from several months to several years in length.

Audit Phase 1 Actions

1. The Chief initiates the project in the Engineering Audit Database.
2. Engineering Audit personnel create a file folder in the Projects in Construction File that contains the Invitation for Bids, a legal size manila folder and a letter-sized folder, red in color. Any document received in Engineering Audit during the active construction phase of a project is placed in this file.
3. Engineering Audit personnel pick up any available full and half scale plans, Right-of-Way plans and proposals from the Print Shop and/or the Finance and Contracts Office. These documents are stored in Room 182 in an organized manner, and an inventory of these documents is maintained in the Project Tracking Database.
4. The Bids Result sheet is printed from the Project Advertising portion of the NHDOT Internet Business Center Site, when the bid sheet is available. Information from the Bid Results sheet is entered in the Engineering Audit Database.
5. Assistance is provided to field personnel on an as-requested basis for various items. Help setting up CMS, records, answering questions about payment items, providing cross-sections, etc. are examples of assistance that Engineering Audit personnel provide during the construction phase of a project.
6. Field personnel will be allowed the use of computers, the digitizer and/or desk space in the Engineering Audit office to perform work on their project, if these resources are available. The project records for active may also be stored in Engineering Audit if requested by field personnel.



Project Records Receipt

Phase 2 of the Engineering Audit Process involves the receipt of project records from the field, and it also includes the time period prior to any audit work being completed while the records reside in Audit. Records will usually be turned into Room 270 of the Morton Building after completion of the project; however, some projects will be turned in before their completion for storage. ALL the various documents received when a project is turned in are kept until project wrap-up in Phase 8. If the project records are to be audited in an outside office, the records will be transferred to that location only after the Engineering Audit Section has logged in the records.

Audit Phase 2 Actions

1. Engineering Audit personnel log in project records delivered by Bureau of Construction field personnel, completing Part A and Part B of the Project Log sheet contained in Appendix A, noting the date when the records have been turned in for storage and/or for auditing. Project records turned in prior to the project work being finished on a project will only have the storage date noted. Incomplete records turned in for finished projects will also only have the storage date noted until the missing information is received, at which point the in for audit date will be entered. Complete records turned in for finished projects will have the same date entered for in for storage and in for audit.
2. The Verification for Certificates of Compliance sheet contained in Appendix B is completed during project log in.
3. The Project Log sheet is forwarded to the Supervisor for review and then to the Chief, who updates the Project Tracking Database and places the Log sheet in the Received Projects book.
4. The project records are placed in one or more storage bin locations, as needed, by the person logging in the records, and the bin slot(s) used is noted on Part A of the log sheet.
5. The person logging in the records moves the project folder in Audit from the 'Projects in Construction' file to the 'Projects in Audit' file.
6. The mylars for the project plans, if available, are obtained from the Bureau of Bridge Design and/or Highway Design (Final Design or Consultant Design), and the right-of-way plans, if available, are obtained from the Bureau of Right of Way by the person logging in the records. The mylars are placed in the tub and the tub slot(s) used is noted on Part A of the log sheet.

7. The person logging in the records separates federal payrolls out from the records, and the payrolls are forwarded to the Labor Compliance Office at Human Resources for approval.
8. The person logging in the records or the Supervisor notifies the CMS Technical Support Specialist that the project has been turned into Engineering Audit, so a final CMS update can be made.
9. The secretarial staff in the Bureau of Construction is notified by the Supervisor or Chief that the records for the project have been turned into Audit.
10. The Supervisor or Chief requests the initial Worksheet #1 electronically from Mainframe Operations.
11. The Supervisor or Chief assigns the project to an Engineering Auditor.



Pre-Audit Records Review

Phase 3 of the Engineering Audit Process involves the preliminary work that is necessary to prepare for the actual audit completed in the next phase. The Auditor becomes familiarized with all the records and plans associated with a project during this phase. The Auditor completes all of the tasks below before performing a detailed audit.

Audit Phase 3 Actions

1. The supplementary specifications, special provisions, and prosecution of work in the project contract are reviewed.
2. The correspondence file and the daily reports are reviewed.
3. The field record plans and cross-sections are reviewed.
4. The general notes in the Record Book are checked. The general notes are referenced to the item summary pages and the field notebook pages where applicable.
5. Any other material associated with the project is examined for its relevance to the audit.
6. The Audit Reference Log sheet contained in Appendix C or a similarly constructed list on a blank sheet of paper is used to note any issues or potential questions that are identified during the preliminary review.

Division 800

Audit Phase

4

Project Records Audit

The Auditor conducts a detailed audit of the project records in Phase 4 of the Engineering Audit Process. For large projects, a team of auditors could accomplish the auditing of the various items in a project. The recommended or typical number of workdays for the Auditor to audit a project, based on the final dollar value of a project, as shown below.

<u>Project Total Dollar Value</u>	<u>Typical # of Workdays to Complete Audit</u>
Up to \$50,000	1
\$50,000 to \$500,000	1 to 5
\$500,000 to \$1 Million	6 to 10
\$1 Million to \$3 Million	11 to 15
\$3 Million to \$6 Million	16 to 20
\$6 Million to \$10 Million	21 to 25
Over \$10 Million	Approximate # of Days = Value/\$400,000

The Engineering Audit consists of a study, an analysis, and an investigation of construction project records. The Auditor should look for backup data, source notes, cross-references, etc., for every entry in the Record Book. It is not sufficient to just mechanically check computations. The Auditor should understand the intent of the project plans and specifications when checking the records. The Auditor follows the steps below to complete the audit, unless directed otherwise by the Supervisor or Chief.

Audit Phase 4 Actions

1. The Auditor chooses a colored pencil that will be used throughout the audit. The color should be different than any color used by field personnel or another Auditor on the same project. THE AUDITOR WILL NOT USE RED except that vermilion red is used for preparation of any As-Built plans in the next phase of the audit.
2. Using the colored pencil chosen, the Auditor signs and dates the Record Book title page at the front of the Record Book.
3. Each pay item in the contract is reviewed and analyzed in the audit. The Auditing Guidelines in Appendix D summarize important points to consider in the audit for numerous, but not all pay items, and the Guidelines should be referred to as needed while auditing the records. Also, the method of measurement and basis of payment in the standard specifications or special provisions of the contract must be checked. Carefully check any item designated as a final pay quantity (F), ensuring Standard Specification 109.11 has been followed for computing the (F) item quantity.

Minor adjustments to non-conforming decimal payments do not necessarily need to be made. These should be referred to the Supervisor or the Chief for disposition.

4. All computations in the Record Book are checked and marked by the chosen colored pencil. Make no erasures of any notes on slips, the Record Plans, the Record Book or any other records turned in by the Contract Administrator. Prior to changing figures in the Record Book, redo the computation on a separate sheet or on a photocopy of the record page. A major error found will require a change on the record book page. **DO NOT MUTILATE THE RECORD BOOK FOR MINOR DISCREPANCIES.** Where a figure may be slightly incorrect mathematically, but not off enough to make a significant difference in the total, write 'OK' beside it instead of a check mark. All work performed on computation sheets is dated and identified with project name and number, and sheet totals and entries in the Record Book must be cross-referenced 'To' and 'From'. Another auditor or the Supervisor should check changes made in the record book from the audit, and this check is referred to as a BACK-CHECK.
5. When an entry in the Record Book has been eliminated, a note of explanation showing the source of the change is added on that line.
6. When making corrections, cross out the whole figure, not individual digits.

CORRECT:	255.2	INCORRECT:	5.2
	258.2		258.2

7. When pages in the Record Book are prepared by Engineering Audit they are to be marked with the following: (These pages may be in pencil)

(A) "This page prepared in Engineering Audit"

(B) Computed by _____ Date _____
Checked by _____ Date _____

(C) Project name and number in the upper left hand corner.

EXAMPLE: Pittsfield-Barnstead, RF-F-123-1(8), P-7440-B.

(D) Page numbers to be sequential to item numbering system - see Construction Manual, Section 803.

8. In many instances, the Record Book item totals will not agree with the quantity book totals in CMS. Some entries in the computer may not have been entered in the Record Book. Refer to the quantity book in CMS for missing entries. Missing entries found in the quantity book should be reviewed with the Contract Administrator and/or the Supervisor prior to entering them in the Record Book. There may be a reason why the entries were not brought forward to the record book.
9. Use the Audit Reference Log in Appendix C or a notepad to record questions regarding contract pay items, pay limits, weight slips, special provisions, etc., which will later be answered by the Contract Administrator. Each page used will be identified with the project name and auditor recording the problems. Each question and problem will be further identified as to item number,

Division 800

Project Records Audit (Cont.)

general note number, or any other source data. Questions should be detailed enough so that someone else could take over and not have to spend time determining what the questions mean. Questions should be answered in the records in such a way that the same question should not occur again.

10. DIGITIZING - The use of the digitizer is one accepted method of determining final excavation volumes. A digitizer, which measures areas in square inches, is available in the Engineering Audit Office. Most of the digitizing will be done on rolls or cross-section sheets with various scales, depending on whether the project is in English or Metric units. When checking digitizing done by others, locate the limits used originally and re-digitize the area. The reading should be within 0.05 square inches to be an accurate check, or the accuracy must be within good engineering judgment, in which case the term 'OK' is used. When checking digitized areas and a consistent discrepancy is found, either always higher or lower than the original, the Supervisor should be informed and the cause determined. Do not compute the final quantity sheets until the digitized areas have been back-checked. Determine the correct scale of the work before computing the quantities. For digitizing plan and cross section areas use the following conversions.

$$N \text{ in}^2 \times C \text{ ft}^2/\text{in}^2 (\text{m}^2/\text{in}^2) = A \text{ ft}^2 (\text{m}^2)$$

N = number of in² digitized; C = conversion factor; A = area ft² (m²)

For example:

Digitized 6.32 inches of common excavation on a 20 scale x-section.

Area of excavation at that section:

$$N \text{ in}^2 \times C \text{ ft}^2/\text{in}^2 = A \text{ ft}^2$$

$$6.32 \text{ in}^2 \times 400 \text{ ft}^2/\text{in}^2 = 2,528 \text{ ft}^2$$

<u>English</u>	<u>Conversion Factor (C)</u>
1" = 10' (10 scale)	100 ft ² / in ²
1" = 20' (20 scale)	400 ft ² / in ²
1" = 50' (50 scale)	2500 ft ² / in ²

<u>Metric</u>	<u>Conversion Factor (C)</u>
1:50	1.61 m ² / in ²
1:10	6.45 m ² / in ²
1:25	40.32 m ² / in ²
1:50	161.29 m ² / in ²

11. When the audit on a pay item is completed, the Item Total on the record book page is marked with a checkmark or a corrected total, indicating that the item has been audited. All checkmarks or corrected item totals are made using the colored pencil chosen by the Auditor.
12. Once all the items in the project have been audited, Worksheet #1 is completed in accordance with the following instructions:

Worksheet #1 Preliminary Tasks

- Check the quantity book in CMS to see that everything has been accounted for, such as supplementary agreements, extra work orders, etc.

- Check all project field notebooks to see that the appropriate check has been made in the upper right hand corner of the page showing that all items on that page have been checked and brought forward to the Record Book.
- Check the storage bin(s) for the project to be sure everything is accounted for, such as drainage rolls, bridge rolls, etc.
- Check that all general notes are accounted for and cross-referenced.

Worksheet #1 Preparation

- All quantity items filled in under the “THIS FINAL” column, using the summary pages in the Record Book. For items not used, enter a 0.00 in the “THIS FINAL” column.
- Added items - check entries under per specifications, supplementary agreements and extra work. Write item number, description of work, unit, and price. Contract quantity must be 0.00 for all added items that have \$ (dollars) units.
- Unit items entered as 1.00, not 100%.
- Money (\$) items entered as money total. Do not use lump sum.
- Submit Worksheet #1 to the Data Processing office with a signed cover sheet (Appendix E).
- When the worksheet is returned, be sure that the Computer output’s “LAST FINAL” column agrees with Record Book entries.
- An asterisk (*) on a “LAST FINAL” entry indicates a possible error in the decimal of a unit.
- On subsequently revised finals, only the revised amount(s) are entered in the “THIS FINAL” column and resubmitted to the Data Processing office.

Audit Phase

5

As-Built Plans Completion

The As-Built Plans for projects that have record plans are completed in Phase 5 of the Engineering Audit Process. The mylars obtained in Phase 2 are used to prepare the As-Built plans. Some projects do not have As-Built plans and for other projects, such as bridge projects, the preparation of the As-Built plans may not be necessary. If the As-Built Plans are for a bridge, they are returned to Bridge Design. Otherwise, the As-Built Plans are archived with the records. The preparation of As-Built plans is done to ensure that the archived plans contain accurate information.

Audit Phase 5 Actions

The following procedures will be used in the preparation of the As-Built plans. All pertinent information will be transferred from the Contract Administrator's Record Plans to the original drawings. Many original project plan sheets will not have enough physical space to apply all the information needed. In these cases, a new sheet will be prepared for the As-built information. Right-of-Way bound locations, underground utilities layout and summary sheets are some areas that may need new sheets. All changes and additions will be made with a standard color, No. 921 Vermilion Red By Berol Prismacolor. The following is a list of items that will need to be checked for changes. Each of these items will be addressed herein separately.

1. FRONT SHEET
2. TYPICAL SHEETS
3. SUMMARY SHEETS
4. BRIDGE SHEETS
5. ROADWAY SHEETS
 - A. General
 - B. Drainage Pipe and Ditches
 - C. Slope Lines and Clearing & Grubbing
 - D. Driveways, Guard Rail, Fencing, Curbing and Stone Walls
 - E. Profiles
 - F. Right-of-Way Bounds
 - G. Underground Utilities

1. FRONT SHEET

- A. At bottom center – letter AS-BUILT PLANS 3/8” high.
- B. At bottom center underneath AS-BUILT PLANS – letter DATE 3/16” high.

2. TYPICAL SHEETS

- A. Show changes in stationing of base courses and pavement.
- B. Show changes in widths and depths of base courses and pavement.

3. SUMMARY SHEETS

- A. To make changes, line out original numbers and letter in new.
- B. For totals, letter in “As-built Totals” in line above, or next to, totals.
- C. Change stationing, lengths and totals for:
 - 1. Drainage
 - 2. Fencing
 - 3. Guardrail
 - 4. Curbing
 - 5. Conduit

4. BRIDGE SHEETS

- A. Show changes in actual ledge location at abutments.
- B. Show revisions in footings, wings and abutment concrete volumes.
- C. Revise bridge summaries.

5. ROADWAY SHEETS

A. GENERAL

- 1. To note changes, line out original note and letter new information.
- 2. On left center of page letter in appropriate survey book and page for bounds.
- 3. Add “AS-BUILT PLANS” 3/16” high on right side of page above title block.
- 4. Do not plot physical changes of less than 10 feet.

B. DRAINAGE PIPES AND DITCHES

1. Check each drainage run from field books. Indicate and plot any existing drainage found and located by Construction personnel. Find appropriate drainage note on flat plans and make the following changes:
 - a. As each run is checked, darken the dashed pipeline in red. If pipes, C.B.'s, headers, etc. have been moved, show new locations. If they have been deleted, than X out run.
 - b. Removal items, if removed, show ☒ on note. If not removed, use word **DELETED** on note.
 - c. Correct stationing and offset distances.
 - d. Correct length and type of pipe.
2. Inlet and outlet ditches, check the note. If not built, line out note and write DELETED. Same for stone lining. Show ditches added or changed, include whether they are stone lined or not.

C. SLOPE LINES AND CLEARING & GRUBBING

1. From final cross-sections and record plans, plot any major revised slope lines and clearing & grubbing lines.

D. DRIVEWAYS, GUARDRAIL, FENCING, CURBING AND STONE WALLS

1. From field books and record plans, check all drives, guardrail, fencing, curbing and stonewalls.
2. Correct stations and offsets and show changes as needed.

E. PROFILES

1. When there is a grade change, cross out existing grade and write new grade elevation above the old one.
2. Change grade percents, but do not change grade line unless change is more than 1 foot. Show base course depth changes.

F. RIGHT OF WAY BOUNDS

1. From survey book find bounds that were located as set.
2. The original note for the bound on the flat plan is to be left intact.
3. Add a new note for each bound.

EXAMPLE:

<u>BOUND AT STATION 75+50.40</u> RIGHT 99.97 '

4. If a bound is deleted, write DELETED
on the original bound note.

G. UNDERGROUND UTILITIES

1. Check and correct all conduit location, type and sizes installed during construction.
2. Record all utilities constructed by others. These will show on the Contract Administrator's Record Plans.



Supervisory Review

The Audit Supervisor conducts a review of the completed audit in Phase 6 of the Engineering Audit Process. The review concentrates on any changes made in the quantities and in ensuring that the records are complete, so the Final Estimate can be prepared in the next phase. The Supervisor performs the following tasks, preparing written notes during this review if needed.

Audit Phase 6 Actions

1. Verifies that a signed completion certificate has been received.
2. Checks the daily rate used by the Bureau of Construction if liquidated damages are assessed. (See page 71 of the Standard Specifications.) Liquidated damages are entered on Worksheet #1 as Item 900 with the number of days being negative.
3. Accounts for all general notes.
4. Account for all material in the field books and the survey books.
5. Determines if all questions by Audit personnel have been answered.
6. Ensures that all items have been checked and back-checked if needed.
7. Confirms that all certificates of compliance have been received.
8. Contacts the Contract Administrator to tell him/her the final quantities are all set and asks if he/she would like to review them.

9. Any changes made during this review are entered by the Supervisor into the Record Book and back-checked. If changes are made, the Supervisor or Auditor resubmits Worksheet #1 with the changes.
10. **CMS Update:** If the project is in CMS, the Auditor and/or Supervisor adjusts item quantities in the CMS Quantity Book and Record Book resulting from the audit.
11. **Record Quality Score:** The project records are evaluated and scored based on the criteria in Appendix H by the Auditor and/or Supervisor. The Chief enters the score into the Audit Database and ranks the project by score and by category for a given time period, usually a year. Scoresheets are stored in the Accepted Projects binder for the year it was accepted for audit.



Final Estimate Process

The Final Estimate is prepared in Phase 7 of the Engineering Audit Process, and it is submitted to the Bureau of Construction. The Final Estimate will not be prepared if there are any known outstanding or unresolved issues that could lead to revisions of the Final Estimate. Nevertheless, revisions to the Final Estimate may still be necessary after its submission to obtain Contractor acceptance. This phase extends until the Contractor, who is given 60 days to review the Final Estimate, accepts final payment; however, longer periods can elapse if the Contractor disputes quantities or makes a claim. Dispute resolution may be needed to settle disagreements on the quantities.

Audit Phase 7 Actions

Preparation of the Final Estimate – The Supervisor determines if a partial estimate was paid while the project records resided in Audit. If a partial estimate had been processed, then a new Worksheet #1 is requested. Otherwise, submit Page 1 of the last paid estimate and write “FINAL” in the upper left corner. Also, write the date range and have the Chief sign in the upper right corner. The estimate date range should include from the day after the last paid estimate to the current date.

Submission of the Final Estimate to Construction – The Supervisor reviews the Final Estimate for errors upon its receipt from Finance & Contracts. The Final estimate should consist of 2 copies of the Final Estimate, 1 copy of the Balance and Excess Report, 1 copy of the Fuel Usage Summary and 1 copy of the Final Breakdown Summary. Correct Final Estimates are signed and dated by the Supervisor and Chief. The Final Estimate is forwarded to the Bureau of Construction with the memorandum in Appendix F.

Revising the Final Estimate - On Worksheet #1 the items to be revised are written under the “New Final” column. The word CORRECTION is written in large red letters at the upper center of Worksheet #1 and on the worksheet cover sheet (Appendix E). The worksheet with the cover sheet is submitted to the Data Processing office. When the worksheet is returned, Page 1 of the previously printed Final Estimate is submitted to Finance & Contracts, with the date range revised.

Dispute Resolution - If dispute resolution is needed, the Supervisor or Chief should schedule a meeting to include the following personnel as needed: Contractor or Contractor’s representative, District Construction Engineer, Contract Administrator, and personnel involved in the Audit. The meeting should be a forum where all facts and views regarding the issue under discussion are presented, so a resolution consistent with the plans and specifications can be reached. The Chief will present unresolved issues to the Bureau of Construction Administrator for guidance.

Database Update - The Chief updates the database with the dates that the Final Estimate was submitted to Finance & Contracts and the Bureau of Construction. The date the Final Estimate was signed by the Chief is also recorded. If a revision to the Final estimate was needed, this is noted in the database. The dollar amount on the Final Estimate, the dollar amount of Retainage on the Final Estimate and the total dollar cost of the project are recorded in the database when the Final Estimate is sent to the Bureau of Construction.



Project Records Wrap-Up

Phase 8, which begins when the Contractor has accepted the final payment, is the culmination of the Engineering Audit Process. This phase involves the preparation of the project records for Archives. The records are divided into several categories, based upon how long they will be retained in storage. Some records are discarded during the wrap-up, some records are kept for a pre-determined number of years and certain records are kept permanently.

Audit Phase 8 Actions

1. The Supervisor or Chief assigns projects for wrap-up to the Engineering Audit staff.
2. The project to be wrapped is assigned an Archive Box Number. The Archive Box Number is the next number in sequence from the last archived project as shown in the Audit Database or Accepted Project binder for the current year.
3. The assigned staff member completes the project wrap-up using the Wrap-Up Guide sheet contained in Appendix G and also completes the wrap-up information in Part C of the original Project Log sheet. The project records are organized into various code groups for storage, based on the retention schedule. Most records are stored in manila envelopes that are placed in cardboard boxes. Each envelope is labeled with the contents, the project name and number, the Archive Box Number, and the retention code. Each box is labeled using a large ink marker with the project name and number along with the Archive Box Number using a small card (about 4 inches square) taped to each box.
4. After the records have been prepared, the Records Section of Highway Design is contacted, so they may pick up the records for archiving.
5. The Wrap-Up Guide sheet and original Project Log sheet are forwarded to the Chief for updating of the Project Tracking Database.
6. The Wrap-Up Guide sheet and original Project Log sheet are placed in the Accepted Projects binder for the current year.

APPENDICES

A to H

Project Log**Part A**

PROJECT NAME: _____	STATE NUMBER: _____
IN STORAGE DATE: ____/____/____	BIN NUMBER: _____
IN AUDIT DATE: ____/____/____	TUB NUMBER: _____

Part B

<input type="checkbox"/>	CMS PROGRAM MANAGER NOTIFIED	<input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Non-CMS
Project					
<input type="checkbox"/>	LAST PAID ESTIMATE # _____	End Date	____/____/____		
<input type="checkbox"/>	RECORD BOOK	Number of Books	_____		
<input type="checkbox"/>	RECORD PLANS	Number of Rolls	_____		
<input type="checkbox"/>	CONTRACT				
<input type="checkbox"/>	PAVING SLIPS				
<input type="checkbox"/>	CONCRETE SLIPS				
<input type="checkbox"/>	LAB REPORTS				
<input type="checkbox"/>	ROAD FIELDBOOKS	Number of Books	_____		
<input type="checkbox"/>	BRIDGE FIELDBOOKS	Number of Books	_____		
<input type="checkbox"/>	DRAINAGE FIELDBOOKS	Number of Books	_____		
<input type="checkbox"/>	LIGHTING FIELDBOOKS	Number of Books	_____		
<input type="checkbox"/>	OTHER FIELDBOOKS	Number of Books	_____		
<input type="checkbox"/>	ROADWAY ROLLS	Number of Rolls	_____		
<input type="checkbox"/>	LEDGE ROLLS	Number of Rolls	_____		
<input type="checkbox"/>	DRAINAGE ROLLS	Number of Rolls	_____		
<input type="checkbox"/>	BRIDGE ROLLS	Number of Rolls	_____		
<input type="checkbox"/>	OTHER ROLLS	Number of Rolls	_____		
<input type="checkbox"/>	CORRESPONDENCE FILE				
<input type="checkbox"/>	DESIGN COMPUTATIONS				
<input type="checkbox"/>	DAILY REPORTS	<input type="checkbox"/> Paper	<input type="checkbox"/> Electronic (CMS)		
<input type="checkbox"/>	SURVEY BOOKS	Number of Books	_____	(Send to Survey Section)	
<input type="checkbox"/>	VIDEOS OR PHOTOS	(Send to Construction Office)			
<input type="checkbox"/>	FEDERAL PAYROLLS & LOGSHEET	(Send to Labor Compliance Office)			
<input type="checkbox"/>	SIGNED SUMMARY OF NONCONFORMING MATERIALS SHEET				
<input type="checkbox"/>	CERTIFICATES OF COMPLIANCE	<input type="checkbox"/> In Record Book	<input type="checkbox"/> In Separate Folder		
<input type="checkbox"/>	CERTIFICATES OF COMPLIANCE VERIFICATION SIGNED BY C.A.				
<input type="checkbox"/>	CERTIFICATES OF COMPLIANCE CHECKED BY AUDIT	Date Checked	____/____/____		

INITIAL WORKSHEET #1 REQUESTED	Date Requested ____/____/____
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Part C

WRAP-UP OF PROJECT	————▶	COMPLETE “RECORDS WRAP-UP GUIDE” FORM
WRAP-UP DATE ____/____/____	BY: _____	BOX # _____
TO: <u>Records Section</u>		



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
CONSTRUCTION BUREAU
ENGINEERING AUDIT SECTION

*VERIFICATION
FOR
CERTIFICATES OF COMPLIANCE*

PROJECT NAME _____

PROJECT NUMBER _____

I VERIFY THAT ALL CERTIFICATES OF COMPLIANCE HAVE BEEN SUBMITTED
AS PART OF THE PROJECT RECORDS.

CONTRACT ADMINISTRATOR DATE

REVIEWED BY ENGINEERING AUDIT DATE

Division 800

Audit Reference Log

Project: _____ **Auditor:** _____

SOURCE	REMARKS OR NOTES (Items should be listed here then crossed out when taken care of.)	REFER TO R.B. PAGE NO.

Division 100 – General Provisions

- If item is paid as a Final Pay Quantity (F) item, then check if payment complies with Standard Specification 109.11.

Extra Work/Change Orders

- Account for all supplementary agreement items added by an alteration order.
- Check required signature on Supplementary Agreements, based on total estimated value:
 - Value up to \$10,000 - signed by Contract Administrator.
 - Value from \$10,000 to \$50,000 - signed by District Construction Engineer.
 - Value above \$50,000 - signed by the Director of Project Development.
- Check that Daily Reports of Extra Work are completed including labor, materials and equipment with computations made in accordance with the Special Provision, if applicable, and Section 109.04 in the Standard Specifications.
- Review labor burden rates to determine if they are justified or are excessive.
- Check the Blue Book regional adjustment factor used for equipment computation (0.95).
- Ensure the Daily Reports for specialized work paid as extra work are included in the Record Book and have 15% added to the total invoice.
- Ensure Daily Reports for approved subcontractor completing extra work have 5% added.

0.80, 0.81, 0.82, Etc. Per Specifications Extra Work

- Review for work that falls under this category including trimming trees, calcium chloride, roadside cleanup, and value engineering.
- Refer to the Standard Specification 104.15 for value engineering proposals.
- Check that extra work is paid using the Daily Report of Extra Work form.
- Ensure the Daily Reports of Extra Work are in the Record Book with the Contract Administrator's signature.

Division 200 - Earthwork Items

- Review design quantity computations and compare with final computations. Large discrepancies must be resolved.
- Review quantities entered in the Record Book as "Built Per Plan" and the design calculations included as back up in the Record Book.

201 Clearing and Grubbing

- Ensure trees and stumps paid for are outside the clearing and grubbing limits.
- Ensure stumps show measurements, and if removing stumps is not an item in the contract, see Spec. 201.5.2.1.

203.1 Common Excavation

- In ledge areas, check the template for correct backslope from subgrade.
- Ensure that line and grade changes are clearly defined.
- Drives and approaches should be clearly defined for excavation. On the cross-sections, write the field notebook page number and the Record Book page number where it is computed.
- Check that the muck is plotted on the record cross-sections. Limits are based on a 1:1 slope from shoulder break to the bottom of the existing muck; see Standard Sheet EW-1, unless the Contract Administrator or plans allowed a deviation.

- Check for pay limits from field notes regarding unsuitable excavation, topsoil, muck, and abandoned roadway and check Record Book and cross-sections for any double payment.
- Digitize the cross-sections to the template lines, with earth and ledge together including any overbreakage areas, if applicable.
- Ensure that odd plus stations are correctly indicated and computed.
- Ensure all original odd stations taken for original quantities are used in final computations.
- Check for overlap or gaps between cross-sections and flat plans. Match lines in excavations should cover the entire area without duplicating quantities.
- Adjust excavations on sharp radius curves for radial sections - use radial section form.

203.2 Rock Excavation

- Check the typical and specifications.
- Check the template on all sections, ledge rolls and cross-sections.
- Ensure presplit ledge areas are defined - station to station, left or right.
- Ensure no payment is made beyond the presplit line unless authorized by specific general note that identifies additional limits by station.
- Presplit holes – ensure pay length equals original ledge to subgrade.
- Non-presplit ledge – ensure maximum 24" (600 mm) overbreakage, measured horizontally, not exceeded.
- Check that overbreakage backslope extends to subgrade elevation.
- Boulders – check out of section portion added to common excavation. If boulder measures 2 c.y. (1.5 m³) or greater, pay as Item 203.2.
- If no rock excavation item is in contract, check that payment is made per specification under Item 203.2 at a price of 5 times the contract price for common excavation.
- Ensure rock excavation is deducted from combined total excavation.
- Check that all deducted rock is included in combined quantity and note any exceptions to this case.

203.6 Embankment-in-Place

- Check for any changes made to old ground or to the final template because it could result in a change to embankment-in-place quantity.
- Refer to the Earthwork Summary for items to be included in the embankment-in-place item.

206.1 Common Structure Excavation

- Check for subsidiary limits for all items that this item is involved with. Items 603, 604, 605, etc. Example: pipes = 9 feet (2.7 meters).
- Review closely for upper and lower limits. If within roadway limits, then the subgrade is upper limit. Over 9 feet (2.7 m) excavation is paid the actual quantity.
- Review each drainage run in its entirety prior to auditing another run.
- Check each page in the field notebook's top right corner that the audited quantities have been carried to the summary pages of the various items involved.
- Ensure exploratory excavation is clearly noted by Contract Administrator, and paid per specification under Item 206.19 at 5 times the unit price of the class of excavation encountered.
- Check drainage summary for design intent. Excavation for stone fill items and/or ditches is generally paid under item of excavation being performed, i.e., channel - paid as channel excavation, ditch in a cut area - common excavation.

- Check for changed elevations - Lowering the elevation of a planned pipe more than one foot (300 mm) requires payment of common structure excavation, except underdrain pipe.
- When unsuitable material is removed, refer to spec 206.4.1.1 for the correct limits of payment.

206.2 Rock Structure Excavation

- If not in the contract, check that any excavation is paid under Item 206.2 per specification at a price of 5 times the bid price of Item 206.1.
- Check the subgrade elevations used for cross pipe excavation quantities.
- Check that the outside bottom of the sump is used as the lower limit for catch basin, drop inlet, and manhole excavations.
- Ensure that the underdrain excavation limit is 0.5 feet (150 mm) below flow line elevation in ledge.
- Ensure that the cross pipe excavation is 1.0 foot (300 mm) below the bottom of the pipe in ledge.
- Check that all solid rock encountered within the limits specified by Spec. 206.4.1.1 is measured for payment.

Division 300 - Base Courses

- Check drive quantities.
- Review the general notes, record sections, record profiles, and field notebooks for changes affecting base materials i.e., ledge section changes, excavation depth changes and unsuitable material removed in cut sections.
- Check crushed gravel for shoulder leveling, which is measured by the cubic meter (cubic yard) determined by using 80% of the loose volume of material measured in vehicles.

Division 400 - Pavements

403 and 411 Plant Mixes

- Check that hot bituminous pavement slips are identified as to project name and number.
- Check that roadway and bridge splits are cross-referenced in both Record Books.
- Verify that other projects are cross-referenced in both Record Books.
- Account for notes on individual slips.
- Check computations for tonnage deducted from the slip totals. Ensure reasons for deductions are clearly stated.
- Run an adding machine tape of the tonnage for each day's slips when inaccuracies are found or splits are made.
- If pavement is QC/QA, check that pay adjustments have been computed for Quality of Hot Bituminous Pavement (Item 51.400 or 1010.3) and Quality of Ride Smoothness (Item 51.401 or 1010.4). See the Special Provisions in the contract for QC/QA information.

410 and 413 Bituminous Surface Materials

- Ensure that delivery slips are in order and identified with project name and number.
- Check that split loads to other projects are noted in the Record Book and verified with other project records.
- Ensure deductions recorded in Record Book.

Division 800

Division 500 – Structures

502 Removal of Existing Bridge Structure

- Check bridge plans closely for limits, both horizontal and elevation of removal, and show those limits on any sections so that duplication of payment under another item will not occur.

504 Bridge Excavation

- Soil excavation more than one foot below the plan elevation or assumed bedrock elevation is paid at 150% of the bid price of the appropriate bridge excavation under Item 504.4131 per specification.
- Ensure no payment for bedrock excavation more than one foot below plan elevation is made.
- If plan elevation not clearly indicated on bridge plans, check with Supervisor for determination of correct elevation.
- Material removed from existing structures is considered bridge excavation if not paid under Item 502.
- If no item for rock bridge excavation, rock removed is paid at 5 times the contract price for common bridge excavation under Item 504.2 per specification.

510 Bearing Piles

- Pile record should be analyzed completely for correct pay quantities under this item.
- Steel pile cut-off material will be paid for at the invoice costs plus 15 percent.

520. Portland Cement Concrete

- Check class of concrete for computation limits and unit of measure.
- Compute tapered volumes by the prismatic formula $V=L/6(A_o + 4A_m + A_l)$.
- Class T concrete may be computed based on the actual yield as determined in the field, instead of computing to the neat lines as shown on the plans.
- Concrete calculations — Do not make calculation changes in field records until reviewed by Supervisor.
- If concrete is QC/QA, check that the pay adjustment has been computed and paid under Item 51.510 or 1010.41. Refer to the Special Provisions in the contract for the correct methods of calculating the pay adjustment.

582 Slope Paving

- All items relative to slope paving except granular backfill and concrete sealer are subsidiary.

583, 585, 586 and 587.1 Stone Fill

- Excavation required to place these items paid as type of excavation performed.
- Gravel blanket material will be paid under Item 209.

Division 600 - Incidental Construction

603, 604 and 605 Drainage

- Review final sections, record flat plans, cross-sections, drainage rolls, field survey books, field notebooks, and design quantities.

- Review general notes for drainage information.
- Review each drainage run in its entirety prior to auditing other runs.
- Put a check mark on each item total in the field notebook to indicate the run has been checked, and a check mark on the upper right corner of the page to indicate the totals have been carried to the item summary page in the Record Book.
- When checking pipe runs in ledge areas, check ledge rolls to make sure height of ledge agrees with survey notes - ledge rolls help to determine the limits in ledge runs.
- Check measured lengths of pipes against flat plans – account for survey stationing equations.
- For a catch basin and manhole, up to the first 8 feet (2.5 m) equals one unit. Divide additional depth by 8 feet (2.5 m), add to the unit and round to the nearest tenth of a unit.
- For a drop inlet, up to the first 5 feet (1.5 m) equals one unit. Divide additional depth by 5 feet (1.5 m), add to the unit and round to the nearest tenth of a unit.
- Check that reconstructed CB's, DI's & manholes are measured to the nearest tenth of a foot (meter). At least 6 inches (150 mm) of reconstructing will be allowed in all cases.
- Check that field-measured depths go from the bottom of the frame to top of the base.
- When a unit is placed in excavated ledge, check that 1.358 c.y./ft. (3.3 m³/m) of excavation is paid if precast reinforced units are used or 1.564 c.y./ft. (3.80 m³/m) is paid if other standard units are used. Paid as item 206.2, rock structure excavation.
- Review the special CB's, DI's, and manholes details shown in the plans.
- Ensure no payment is made for excavation or granular backfill below the outside bottom of the base unless specifically ordered by the Contract Administrator.

606 and 607 Guardrail & Fence

- Check plans for design lengths (or number of units) against measured lengths (or number of units) from field notebooks.
- Ensure any differences explained in Record Book.
- Check the general notes for pertinent changes.
- Check that hot bituminous base courses placed adjacent to concrete barrier are paid for under 403.12.
- Ensure that clearing for fence lines item are accounted for under Item 201.6.

608. Sidewalks

- Check all base course material for payment.

609. Curb

- Check design quantities against measured lengths from field notebooks, for inconsistencies.
- Bituminous curb - check all paving slips for possible double payment where split loads were used.

614. Electrical Conduit

- Check for proper upper limit of excavation.
- Check that unsuitable excavation, earth excavation over 9 feet (2.7 m), and all rock excavation are paid under Item 206.

618. Flaggers & Uniformed Officers

- Check that flaggers are paid by the actual hours authorized, as recorded in the records.

- Check that uniformed officers and uniformed officers with vehicles are paid for at the invoice price plus a 5 percent mark-up.
- Ensure the time reports and invoices are included in the Record Book.

619. Maintenance of Traffic

- Check that calcium chloride used for maintenance purposes is paid as extra work, materials + 15%. Labor and equipment is subsidiary.

622. Markers and Bounds

- Check that rock excavation for placement of bounds is paid as Per Spec. Extra Work, Item 0.80 series.

641. Loam

- Check all loam and humus computations prior to auditing any landscaping items (640 Items); seed, fertilizer, limestone and mulch.
- Check for overlap in loam and humus areas.
- Review the slope lengths and widths used for the method of measurement.

642. Limestone

- Check that limestone is paid based on delivery slips, not to exceed the rate ordered.

643. Fertilizer For Grasses

- Check that fertilizer is paid based on delivery slips or weight slips, not to exceed maximum rate specified, multiplied by the appropriate measurement factor from Table I, Spec. Book, page 515.

644. Grass Seed

- Check that grass seed is measured by the pound (kilogram), based on delivery slips, but not to exceed the rate specified or ordered.
- Determine if the Contract Administrator authorized excessive application.

645. Erosion Control

- Review computations for mulch on all loam and humus areas.

647. Humus

- Review the slope lengths and widths used for the method of measurement.
- Account for deductions for drives, sidewalks, stone fill areas, and work done under Item 699 or other pay items.
- Check that the humus depth is the typical 3-½ inches (90 mm).
- Check that excavations required to undercut slopes, in order to accommodate the material, are subsidiary.

698. Field Facilities

- Check that periods of less than one month are computed at the rate of 1/30 of the unit price per month for field offices and testing laboratories.

699. Temporary Project Water Pollution Control

- Review the specification thoroughly. Work under this item will be computed on a dollar basis like extra work; where work falls within the specifications for a contract item, a computation will be made using the appropriate quantity multiplied by the contract unit price.
- Ensure that the daily reports of extra work are in the Record Book with Contract Administrator's signature.
- Ensure that the invoices or billings for materials are in the Record Book.

Miscellaneous - Special Attentions

Asphalt Adjustment - 50.01 or 1010.2

- Check the contract for the asphalt adjustment special attention.
- The asphalt adjustment price is based on the actual month the pavement is placed.
- Monthly asphalt price letters are kept in a binder in Engineering Audit.
- Computations are automatically generated by the CMS system. Check the monthly quantity used, the asphalt factor, the monthly price and the fixed base price only.
- The asphalt factor is based on the job mix formula and not values from test results.
- There must be an increase or decrease greater than 10% of the fixed base price before any adjustment is to be paid.
- The asphalt adjustment summary page is included in the Record Book, whether or not adjustments were necessary.

Fuel Adjustments – Diesel 50.04 or 1010.11 and Gasoline 50.05 or 1010.12

- Check the contract for the fuel adjustment special attention.
- Monthly fuel price letters are kept in a binder in Engineering Audit.
- Computations are automatically generated by the CMS system. Check the monthly fuel price and fixed base price only.
- There must be an increase or decrease greater than 10% of the fixed base price before any adjustment is to be paid.
- No price adjustment is allowed beyond the Project completion date unless there is a Department-approved extension of time.
- The fuel adjustment summary pages (diesel and gasoline) are included in the Record Book, whether or not adjustments were necessary.

Division 800



STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION

TO Office of Information Technology

FROM Bureau of Construction
Engineering Audit Section

COVER SHEET for WORKSHEET #1 - COMPUTATIONAL

(Please run the attached worksheet data under WORKS1)

WORKSHEET TYPE:

- ☐ **Initial Worksheet**
- ☐ **Supervisor Worksheet**
- ☐ **Correction Worksheet**

Project Name: _____ Project Number: _____

Submitted By: _____ Date Submitted: _____
Engineering Audit Personnel

Please return completed worksheet to the Engineering Audit Section, Bureau of Construction

To be completed by Office of Information Technology Personnel:

Completed By: _____ Date Completed: _____
OIT Personnel



**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**

DATE:

FROM: Chief of Engineering Audit

AT: Engineering Audit Section

SUBJECT: ☐ **INITIAL FINAL ESTIMATE**
☐ **REVISED FINAL ESTIMATE**

for

TO: Bureau of Construction

MEMORANDUM

Transmitted herein are the following documents:

1. Two copies of the Final Contract Estimate (one signed)
2. Engineer's Estimate of Balances and Excesses (signed)
3. Fuel Usage Summary
4. Final Breakdown Summary

According to the records in Engineering Audit, the status of required contract documents for this project that could affect release of the final payment is as follows. If your records indicate a different status than shown, please let us know.

**Completion
Certificate**

☐ has been
received

☐ has **not** been
received

FHWA Form 47

☐ is **not**
required

☐ is required, **and**

☐ has been
received

☐ has **not** been
received

cc: file

Records Wrap-Up Guide

Appendix G

Number: _____

Job Name: _____

Box: _____

Date Mylars Scanned: _____

SAVE

	Sent to Records Section (No Code)
	- MYLAR PROJECT PLANS - except cross sections
	- MYLAR R.O.W. PLANS – Make sure plans are “recorded”
	Sent to Records Section (Code 01)
	- ORIGINAL PLAN CROSS SECTIONS
	Sent to Records Section (Code 03)
	- ALL SURVEY BOOKS
	Sent to Records Section (Code 05)
	- FIELD NOTEBOOKS - manila envelope - # of books
	- RECORD BOOK - # of books
	Sent to Records Section (Code 11)
	- BARRIER MEMBRANE INSPECTION REPORTS
	- BLASTING PLAN / LOG / REPORT
	- CERTIFICATES OF COMPLIANCE
	- CONCRETE DELIVERY SLIPS
	- CONTRACTOR'S DAILY REPORTS
	- CONTRACTORS SCHEDULE
	- DESIGN QUANTITIES / CALCULATIONS
	- DISPOSAL AGREEMENTS
	- EROSION CONTROL PLANS / REPORTS
	- EXTRA WORK
	- FABRICATED STEEL REPORTS
	- <i>FINALS FOLDER</i> – assemble and label manila file folder w/elastic
	- CONTRACT – C.A.'s COPY
	- FINAL ESTIMATE MEMORANDUM
	- LAST WORKSHEET #1-single spaced
	- FINAL PAYMENT LETTER TO BUDGET & FINANCE
	- SIGNED VERIFICATION - CERTIFICATES OF COMPLIANCE
	- SIGNED COMPLETION CERTIFICATE
	- ENGINEERING AUDIT NOTES / QUESTIONS
	- FLAGGER TICKETS
	- GRAVEL / LOAM DELIVERY SLIPS
	- HAZARDOUS WASTE DOCUMENTS
	- LAB BOOKS – keep on site testing
	- LABOR COMPLIANCE - field audit "background material"
	- MILL TEST REPORTS
	- PAINT TESTS / REPORTS
	- PAVING SLIP
	- PAYROLLS (FEDERAL)
	- PILE DRIVING NOTES / PLANS
	- PRECAST INSPECTION REPORTS
	45

SAVE

	Sent to Construction (Construction Code 05)
	- ACCIDENT REPORTS
	- CORRESPONDENCE
	- ALL ORIGINALS /HANDWRITTEN NOTES / EMAILS
	- ALL FROM CONTRACT ADMINISTRATOR
	- ALL FROM CONTRACTORS
	Sent to Bridge Design (No Code)
	- MYLAR BRIDGE PLANS - return and log in bridge book
	- ALL RECORDS/SHOP DRAWINGS STAMPED
	"BRIDGE DESIGN" - send via messenger mail

TRASH

	- 699 FOLDER
	- B & E's
	- BLUE TOPS
	- COMPUTATIONS - ON SITE
	- COPIES OF CORRESPONDENCE
	- CORRESPONDENCE
	- INTER- DEPARTMENTAL
	- FROM DISTRICT CONSTRUCTION ENGINEER
	- FROM CONSTRUCTION OFFICE
	- TRANSMITTALS
	- FROM MATERIALS & RESEARCH
	- DOT DAILY REPORTS
	- ESTIMATES
	- GEOTECHNICAL REPORTS
	- MONTHLY ASPHALT & FUEL ADJ. PRICES
	- OJT
	- PAYROLLS (NON FEDERAL)
	- PIEZOMETER READINGS
	- PROJECT STAMP
	- R.O.W. PAPER PLANS / PROPOSALS
	- ROLLS- LEDGE, DRAINAGE, BRIDGE
	- SEED TAGS
	- SIDE STAKE NOTES
	- SLOPE INCLINOMETER READINGS
	- SUBCONTRACTOR APPROVALS
	- SURVEY FOLDER
	- TEMPERATURE CHARTS
	- WELDING QUALIFICATIONS

RECORDS RETAINAGE SCHEDULE

Records Wrap-Up Guide

	- QC / QA REPORTS
	- SHOP DRAWINGS
	- STONE DELIVERY SLIPS
	- UNIFORMED OFFICER INVOICES
	- UTILITY AGREEMENTS / REPORTS / PLANS
	Sent to Records Section (Code 18)
	- RECORD PLANS (full scale or 1/2 scale) remove standard sheets

Appendix G

- No Code – Saved Permanently
- Code 01 – Saved 20 Years
- Code 03 – Saved Permanently
- Code 05 – Saved 50 Years
- Code 11 – Saved 4 Years
- Code 18 – Saved Permanently
- Construction Code 05 – Saved 10 Years

Records Quality Score Criteria

ACCURACY

4. No quantity errors found in the records
3. Only a few minor quantity errors found in the records
2. Many minor quantity errors found in the records
1. One significant quantity error found in the records
0. More than one significant quantity error found in the records

NEATNESS

4. Exceptionally neat and legible records
3. Mostly neat records, some exceptions
2. Average neatness
1. Neatness of records could use improvement
0. Sloppy records

EASE OF UNDERSTANDING

4. Records complete with notes and references leaving no questions unanswered
3. One or two instances where records caused questions about source entries
2. Several instances where records caused questions about source entries
1. Many instances of records being hard to understand leading to questions
0. Instances of incomprehensible records requiring rewriting

COMPLETENESS

4. All required records, entries and backup documents in the records
3. Only a few missing required records, entries and backup documents in the records
2. Many missing required records, entries and backup documents in the records
1. Records are barely complete enough to conduct audit
0. Records are so incomplete that audit cannot be completed

DELIVERY OF RECORDS

4. Project records delivered to Audit within 10 days of project completion date
3. Project records delivered to Audit from 11 to 30 days of project completion date
2. Project records delivered to Audit from 31 to 60 days of project completion date
1. Project records delivered to Audit from 61 to 90 days of project completion date
0. Project records delivered to Audit over 90 days from project completion date

CATEGORY OF PROJECT (Determined at end of year from actual projects amount ascending from lowest to highest project values)

- | | |
|-------------|--|
| Category 1. | Project whose total value places it in the 0% to 20% range of project values |
| Category 2. | Project whose total value places it in the 20% to 40% range of project values |
| Category 3. | Project whose total value places it in the 40% to 60% range of project values |
| Category 4. | Project whose total value places it in the 60% to 80% range of project values |
| Category 5. | Project whose total value places it in the 80% to 100% range of project values |

Records Quality Score Criteria

Project Name _____ Number _____

Scored By: _____

ACCURACY Score: _____

NEATNESS Score: _____

EASE OF UNDERSTANDING Score: _____

COMPLETENESS Score: _____

DELIVERY OF RECORDS Score: _____

Project Completion Date

Records Storage / In Audit Date

Difference in Days

Total Score: _____

PROJECT INFORMATION

Contract Administrator _____

Project Personnel _____

Project Personnel _____

Project Personnel _____

Project Personnel _____

Project Personnel _____

Project Personnel _____

Total Number of Items: _____

Final Value of Project: \$ _____

DOLLAR VALUE CATEGORY (circle one): **1** **2** **3** **4** **5**
(To be determined at the end of the year)